DOCUMENT RESUME

ED 457 919 JC 010 676

AUTHOR Lash, Christine F.
TITLE Athena's Daughters: Women's Perceptions of Mentoring and the Workplace.
PUB DATE 2000-12-00
NOTE 134p.; Doctoral Dissertation, Arizona State University.
PUB TYPE Dissertations/Theses - Doctoral Dissertations (041)
EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS *Administrator Attitudes; *Community Colleges; *Epistemology; Higher Education; Interpersonal Relationship; *Mentors; Two Year Colleges; *Women Administrators
IDENTIFIERS *Egan (Kieran)

ABSTRACT

The purpose of this study was to determine if Egan's theory of women's mentoring styles, and related attitudes toward mentoring and the workplace, generalize to women in higher education administration and to women of color. Egan's theory of women's mentoring, based upon the epistemologies conceptualized by Belenky, Clinchy, Goldberger, and Tarule, posit five epistemological levels. A survey instrument designed to assess epistemological level, workplace and mentoring attitudes, and to gather demographic data was mailed to 290 women Chief Executive Officers of community colleges in the United States. There was a 40% response rate. Factor analysis revealed two epistemological levels in this group of women; however, attitudes toward mentoring were not statistically different between the two levels. No statistically significant differences were observed between white women and women of color in epistemological level or in attitudes about mentoring and the workplace. The results of this investigation do not support Egan's mentoring theory and its potential to generalize to women in different professions and to women of color. It is recommended that this study be replicated with respondents from a variety of administrative levels in a variety of fields to assess the efficacy of Egan's theory for explaining differences in the mentoring experiences and workplace attitudes of working professional women. (Appendices include the survey instrument, various scaled items, and a comparison of cluster loadings. Contains 154 references and 19 tables.) (Author/EMH)

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ED 457 919

ATHENA'S DAUGHTERS:

WOMEN'S PERCEPTIONS OF MENTORING AND THE WORKPLACE

by

Christine F. Lash

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

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The purpose of the current study was to determine if Egan's theory of women's mentoring styles, and related attitudes toward mentoring and the workplace, generalize to women in higher education administration and to women of color. Egan's theory of women's mentoring, based upon the epistemologies conceptualized by Belenky, Clinchy, Goldberger, and Tarule, posit five epistemological levels. A survey instrument designed to assess epistemological level, workplace and mentoring attitudes, and to gather demographic data was mailed to 290 women Chief Executive Officers of community colleges in the United States. There was 40% response rate. Factor analysis revealed two epistemological levels in this group of women; however, attitudes toward mentoring were not statistically different between the two epistemological levels. No statistically significant differences were observed between white women and the women of color in epistemological level or in attitudes about mentoring and the workplace. The results of this investigation does not support for Egan's mentoring theory and its potential to generalize to women in different professions and to women of color. It is recommended that this study be replicated with respondents from a variety of administrative levels in a variety of fields to assess the efficacy of Egan's theory for explaining differences in the mentoring experiences and workplace attitudes of working professional women.

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CHAPTER ONE

INTRODUCTION

The benefits derived from a mentoring relationship for the mentor, protégé and the host organization are numerous. These include, but are not limited to, increased professional satisfaction and attainment (including both position and income) for both the mentor and the protégé and, for the organization, a lower rate of employee turnover and a more loyal and dedicated labor force (Howard, 1988; Kanter, 1993; Kram, 1985). However, as with most traditional organizational structures, educational institutions and managerial or leadership styles in America, the prevalent model arises from a male perspective and definition of the workplace, relational forms and coveted rewards (Apter, 1993; Kanter, 1993; McKenna, 1997).

When the skills, characteristics and abilities required for success are determined by those already in positions of power and status, the implication is that mentoring is key to the replication of the status quo; that is men (generally white men) defining in masculine terms those attributes that are required for success (Apter, 1993; Astrachan, 1986; Helgesen, 1990; Kanter, 1993). This situation then begs the questions: "What of those individuals who do not or cannot fulfill the requisite requirements, such as women and minorities? How does mentoring provide these constituencies with the appropriate guidance and training to achieve their highest potential?" Or, even more pointedly, "Does the traditional mentoring relationship provide the necessary training for individuals from these groups?"

Mentoring Defined

Mentoring is a vehicle by which important information about an organization is transmitted through informal mechanisms. This information can include culture, customs, values and language that cannot be conveyed in any other manner because they are so deeply ingrained in the very composition of the organization that they are not readily apparent (Bell, 1996a; Caruso, 1992; Gupton & Slick, 1996; Hale, 1996; Howard; 1988; Missirian, 1982; Murphy, 1992; Richardson, 1995; Swoboda & Millar, 1986; Twale & Jelinek, 1996; Wenninger , 1994). It is as if protégés are accepted into a "secret society" wherein they will learn the rituals and passwords permitting entrée into professional success. But, what is this thing called mentoring? What roles are performed? Who participates? And, how does it occur?

Mentoring, in a traditional sense, is defined as an interpersonal relationship between two individuals, a mentor and a protégé (or mentee) (Howard, 1988; Schockett, 1984). The mentor is typically a member of a hierarchical structure having sufficient position and experience to be able to induct a neophyte (protégé) into the workings of an organization. The protégée is usually an individual of lesser status, but one who is recognized within the organization as having ambition and promise (Biermea, 1996; Caravalho & Maus, 1996; Howard, 1988; Schockett, 1984).

From a developmental perspective, the mentoring relationship is analogous to "the zone of proximal development" concept advanced by Russian psychologist Lev Vygotsky. Vygotsky's "zone of proximal development" (ZPD) is that area between an individual's current level of functioning and their highest potential level (Miller, 1993). It is within this zone that the teacher or more competent other (or, as in this context, the

mentor) instructs the learner or neophyte (or, the protégé). This instruction is accomplished through cues, clues, leading questions, tasks and challenging projects, designed to develop those skills, characteristics and abilities required to reach the highest potential (Wertsch & Tulviste, 1992).

Problem Statement

Having a more experienced individual protect, guide and teach a neophyte has been a trust in human history since Ulysses requested it from his friend Mentor (Wiltshire, 1998). It is through this transfer of information that society, families and organizations pass on their traditions, values, and customs from one generation to the next. Equally important as what is taught, is who teaches this information.

Most organizational structures are based upon a patriarchal and hierarchal model that rewards and punishes according to male values and characteristics (Apter, 1993; Kanter, 1993; Kram, 1983; Senge, 1990). Therefore, the form that traditional mentoring takes strongly supports values of intense loyalty, competition, and drive for power and status as defined by the male model (Howard, 1988; Howard & Morgan 1993; Schockett, 1984; Shakeshaft, 1987). This traditional model of mentoring fails to acknowledge a diversity of experiences, backgrounds, values or characteristics beyond the white male patriarchy (Astraschan, 1986; Schaef, 1981).

In the 1980's and early 1990's, researchers such as Gilligan (1982), Belenky, Clinchy, Goldberger, and Tarule (1986), Schaef (1981), Wheatley (1993), and Senge (1990) advanced the position that women and minorities bring to our social and professional organizations and relationships important unique skills. They further posit that these skills have heretofore had been overlooked or neglected. Our rapidly

advancing society and organizations require and demand, that all resources be maximally utilized to meet the ever-changing society (Senge, 1990; Wheatley, 1993). Consequently, the exploration of forms of mentoring relationships in addition to those resulting from white male patriarchy is necessary.

Research indicates that women's social and professional development is based upon concern and collaboration within a network of interconnected and interdependent relationships (Belenky et al.., 1986; Gilligan, 1982; Wheatley, 1993). Because of this distinctively female emphasis on interconnectedness and interdependence, the mentoring relationships that women create do not resemble the traditional male mentoring model (Howard, 1988; Schockett, 1984). This recently identified female mentoring model (Howard, 1988; Schockett, 1984) emphasizes multiple relationships, each focusing on a specific issue, of shorter duration than in the traditional male model. It is interesting to note that management consultants such as Axelrod (1999), Lancaster (1997) and Senge (1990) are now advancing a general mentoring model that is quite similar to the female mentoring relationship, i.e., a mentoring relationship with several mentors, each focusing on a specific topic or issue, and that is of a limited duration.

This research project seeks to extend the research of Egan (1996) on women's mentoring as related to epistemological levels (Belenky et al., 1986), women's attitudes towards mentoring, the workplace and the application of various models to the mentoring relationships of women of color. The primary venue for research on mentoring has been the business sector. While valuable insights have been derived from studies in this area, it is necessary to examine mentoring in other professions to fully conceptualize a female mentoring model.

The participants in the current study are women who are Chief Executive Officers (CEOs) at community colleges. While a number of mentoring studies have been conducted in higher education, most of them address the importance of mentoring for career and professional development (Astin & Leland, 1991; Benisimon, 1989; Faulconer, 1995), implications of gender and race (Bova, 1995: Clark & Corcoran, 1986; Cullen & Luna, 1993; Howard-Vital & Morgan, 1993) and the need for women to mentor women (Cox, 1992; Gaskill, 1991; Keyton & Kalbfleisch, 1993). The current study examines women CEOs' cognitive developmental levels as specified by Belenky et al.., 1986, and how these levels impact their attitudes toward mentoring. It is also the case that current research literature does not address important questions about women of color and mentoring, that is, whether women of color hold the same attitudes toward mentoring as their white peers and if they can be classified into similar epistemological categories as those identified by Egan (1996). The current research is designed to advance our understanding of women's mentoring requirements and attitudes, including those of women of color. The results are projected to be useful in mentoring programs for women.

Definition of Epistemological Categories

In her 1996 study, Egan compares women's mentoring with the five cognitive epistemologies identified by Belenky et al.. (1986). The epistemologies, identified as silent, received, subjective, procedural and constructivist, represent five levels of cognitive development through which women mature; from the silent woman who "...sees authorities as being all powerful, if not overpowering... (Belenky et at., 1986,

27)" to the constructivist thought which is that "...all knowledge is constructed and the knower is an intimate part of the known (Belenky et al., 1986, 137).

The five epistemologies are based on hypothesized developmental stages of women's perceptions of the world and their places in it. Following are working definitions of these stages:

Silent: The woman has no voice and no mind of her own. She is the subject of whims, the victim of authority that defines her existence according to external rules.

Received: The woman is a repository for external knowledge, can reproduce ideas from external authority, but does not produce ideas of her own.

Subjective: The woman's knowledge is personal and intuited; she lacks objectivity and is preoccupied with choice between self and other. She shows an affinity with the role of caretaker and nurturer, yet begins to assert her own authority and autonomy.

Procedural: The woman invests in learning and applying objective procedures to obtaining knowledge. Her thinking is encapsulated within a system, so that she can criticize the system, but only in the system's terms, not according to the system's standards. Procedural women seek gratification in pleasing others or in measuring up to external standards—in being "the good woman."

Constructivist: The woman views all knowledge as contextual. She is a creator of knowledge and values both subjective and objective strategies for knowing. She speaks in her own, authentic voice and has learned to "jump outside the system" (Belenky et al.., 1986, p. 134).

Chief Executive Officer Defined

In most instances, the title of the chief executive officer is president. However, in several instances the title of chancellor, provost, executive dean and campus dean are used. Therefore, the functions and responsibilities of the position rather than the title were utilized. For the purpose of this study, the working definition of a chief executive officer is the position that holds ultimate administrative responsibility for the functioning of the campus.

Purpose of this Research

The current study is exploratory in nature. It is designed to address the following questions:

1. How were women chief executive officers (CEOs') of community colleges mentored during their professional development?
2. Into which epistemological level do they primarily occur?
3. Do women of color, who are CEOs of community colleges, show a similar pattern to white women in these positions, in terms of past mentoring experiences and epistemological levels?
4. Are the experiences of women of color with mentoring positive and constructive?

CHAPTER TWO

LITERATURE REVIEW

What is Mentoring?

In The Odyssey, Homer relates the story of Ulysses and the Trojan Wars. Before leaving his homeland, Ulysses asks his friend, Mentor, to protect, guide and teach his son, Telemachuse, during his absence. A not often cited portion of this myth reveals that Athena, goddess of wisdom, had transformed herself into Mentor so that *she* could provide the guidance and protection for the son of Ulysses (Carruthers, 1993).

Until recently, the model for mentoring has been a senior or older individual (usually male) who nurtures, guides, supports, coaches, directs, protects and/or sponsors a younger individual or protégé (also, usually male). This model is slowly changing as more and more women and minorities are achieving occupational and professional positions that were once exclusively held by white males. It is because of the changing demographics of management that there is a need to research, analyze, understand and adapt other forms or models of mentoring.

The definition of mentoring is encompassed within two categories: (1) emphasis on the professional development of the protégé only or (2) emphasis on the professional and personal development of the protégé (Carruthers, 1993). Regardless of which category of the definition of mentoring is emphasized by analysis, they agree that mentoring is an important aspect of professional and career development, as well, as personal growth. It is through this special relationship that the protégé learns the organizational culture and politics, social competencies, work ethics, values, and that s/he is presented to the senior management members at appropriate times and under

favorable circumstances. However, this is not a one-directional relationship. Both the mentor and the organization glean benefits from this relational form. Alleman & Newman (1989) identified eight benefits deriving from the mentoring relationship. They are:

1. increased productivity by both partners;
2. better assessments gained by both partners;
3. management and technical skills improved;
4. latent talent discovered;
5. leadership qualities refined;
6. performance improvement;
7. rusting managers challenged to grow; and
8. better recruitment and retention of skills staff.

Additionally, the mentor is provided with the opportunity to nurture and develop the next generation of upper level managers. This is really a two-fold benefit; first, it provides the mentor with the opportunity of expanding her/his power base both within and outside of the organization. Secondly, it provides the individual the circumstance to express and experience *generativity* as identified in Erikson's seventh stage of psychosocial development (Miller, 1993).

Theoretical Bases of Mentoring in Psychological Literature

Erik Erikson's eight-stage theory of psychosocial development focuses on the "interaction of individual, society and history (Perlmutter & Hall, 1992, p. 290)." Each stage of this theory describes the intrapsychic conflict an individual confronts in her/his development of values and personal meaning over the lifespan. With the successful

resolution of a particular life stage, the individual then progresses to the next life stage. It is during the seventh stage, or midlife stage, that the individual deals with the issues of generativity vs. stagnation. According to Erikson, generativity concerns the establishment and development of the next generation. This stage can be expressed in bearing and rearing one's own children or in guiding other peoples' children, or in *contributing to society* [emphasis added] (Perlmutter & Hall, 1992). It is in the positive expression of this stage through which individuals nurture and guide the next generation. This can be manifested through rearing one's own children, or through professional occupations such as: teacher, writer, artist, nurse, physician (Miller, 1993)—or mentor. In fact, Erikson considered generativity as the driving force in all human organizations (Miller, 1993).

Without the successful navigation of the seventh stage "crisis," (generativity vs. stagnation/self-absorption) the individual would, according to Erikson, develop a "pseudo-intimacy" in which s/he is generally bored with life and tends to treat herself/himself as one's own spoiled only children (Perlmutter & Hall, 1992).

Mentoring is the process through which organizations, public, private, business or educational, replicate or "clone" themselves so that the structural entity will continue beyond the current generation (or business cycle or academic year). Mentoring can be viewed, then, as a professional manifestation (as opposed to the personal manifestation of bearing and rearing children) of Erickson's seventh stage organizations, or their representatives, e.g. senior management or more experienced employees by providing guidance, nurturance and support to less experienced employees, insure that the values,

culture, language and knowledge of the current managerial generation are transmitted to the next managerial generation.

There is another developmental theory that may also apply to the mentoring relationship. Although Vygotsky's developmental theory was constructed to explain children's cognitive developmental processes, it can be used as a model for the protégé's evolution from neophyte to professional through mentoring. Vygotsky 's theory of cognitive development emphasizes social and cultural processes (Wertsch & Tulviste, 1992). Growth is fostered through the forces surrounding the pupil/protégé by the "social dimension of consciousness" (Wertsch & Tulviste, 1992). A child's cultural development manifests in both social and psychological domains. It is from those individuals and structures (family, school, peers, etc.) the child experiences and learns the values, customs, culture, and language of their society. Vygotsky stated the "social relations or relations among people underlie all higher functions and their relationships (p.168)."

Another aspect of Vygotsky's theory that may be applied to the mentor-protégé relationship is the "zone of proximal development." This construct is described as "the distance between a child's (beginner's) actual developmental level, determined by independent problem solving, and the higher level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (Vygotsky cited in Wertsch & Tulviste, 1992). Additionally, Vygotsky included the construct of "scaffolding" within the ZPD. The more competent other not only provides tasks and challenges to the neophyte, but does so within a framework of protection and guidance. The projects are directed towards the level of potential

development rather than the current level of development. However, as the learner develops and strengthens her/his abilities, skills, and competencies, the scaffolding of protection is removed concomitant with the beginner's maturing aptitudes.

This construct can be applied in the interpretation of a mentoring relationship. The mentor, who usually is an older, more experienced individual, or a colleague or peer who is more competent in a specific domain provides guidance, coaching, protection, support, etc. to the protégé. A mentor elects to enter into a mentoring relationship after assessing the protégé's current strengths and weaknesses and her/his future potential. All projects, tasks and instruction presented by the mentor to the protégé are "tied more closely to the level of potential development than to the level of actual development (Vygotsky cited in Wertsch & Tulviste, 1992)."

As stated earlier, mentoring is a developmental process through which the protégé is instructed in the organizational social customs and mores and works with an experienced model always striving to reach the highest potential. The mentoring process incorporates coaching, challenging assignments/tasks/projects, and the posing of "leading questions," in an effort to elicit from the protégé the appropriate responses and behaviors. As the protégé establishes competencies within given assignments, the mentor alters the level and type of protection and guidance provided. When viewed in this way, there is clear analogy between the concepts and implications of Vygotsky's developmental theory and the process of a mentoring relationship.

There are other psychological constructs that impact mentoring relationships: gender role stereotyping and social learning theory (Baugh, Lankau & Scandura, 1996; Eagly, 1978). The concept of gender role stereotyping is a subtle and socio-cultural

development. Within this construct, specific roles are ascribed to women, or, men that have specific expectations, behaviors and duties attached to them (Anderson, 2000; Belenky et al., 1986; Bova, 1995; Burke & McKeen, 1997; Clark and Corcoran, 1986; Cullen and Luna, 1993; Sapiro, 2000; Szymborski, 1996; Wiedman, 1979). Certain characteristics are considered female: nurturance, concern, relationship, dependent, etc., while other characteristics are considered male: strong, independent, in control of emotions, etc. Additionally, there are occupational roles that society has identified as gendered (Sapiro, 2000). Professions such as nursing, teaching (elementary level), clerical, homemaker, caregiver, and all the attributes our culture has ascribed thereto, have been traditionally perceived as female. It is also the case that the characteristics that have been labeled as female have been devalued and regarded as second rate by the patriarchal society (Anderson, 2000; Astrachan, 1986; Sapiro, 2000; Schaef, 1981). This is important to note, especially when examining women's career development. Although women have made strides in all areas of occupational endeavors, many barriers remain, with most of these barriers societal constructs with little or no credence. The dichotomy between women's actual abilities and the gender role expectations can be great.

Social learning theory reflects the role of *experience* in molding individual characteristics, skills and knowledge (Kimmel & Weiner, 1985). Experience refers to not only personal behavior or action, but also vicarious learning, that is, through the observation of others. As children we learn not only by direct instruction but also from monitoring the environment as to what is expected from women and from men. The environment includes parents and siblings, neighbors, friends, teachers or schoolmates,

as well as movies, television and other modes of entertainment. Bronfenbrenner (1995, 1994) eloquently describes this interconnected social organization as an ecological model of development composed of five organized subsystems. These subsystems range from the simplest familial dyad relationship to the most complex subsystem that identifies not only consistency but also change of the individual and the environment, over an extended period of time.

The importance of the interplay between child and parents/siblings, child and teacher/schoolmates, the parents' workplace, the overarching social construction of culture, values and traditions and, of course, the longitudinal and historical influences cannot be minimized (Bronfenbrenner, 1994). All of these factors help to create who the person will be, what values will be expressed, the public and personal identity and occupational choice.

These constructs are important in helping society to teach what roles are and are not appropriate for the respective genders. If, as children, we only have women as teachers, then we perceive that teaching is a female profession. If all the people we see in business are men, then we assume that a business environment is male gendered. Our early learning of gender roles, and how we learn about gender roles is very important. These are the lessons that are internalized and accepted without question, and acted upon during adulthood.

The Traditional Mentoring Model

The traditional mentoring model was created within the framework of the male work-relationship environment (Astrachan, 1986; Bova, 1995; Kanter, 1993; Wiltshire, 1998) and is considered the primary mentoring model (Russell & Adams, 1997).

Patriarchy, hierarchy, power, prestige, and money are key elements of this model. It assumes that individuals involved in such a relationship define success in the same terms and with the same end goal (Astrachan, 1986; Caruso, 1992; Eby, 1997; Enscher & Murphy, 1997; Himelstein, 1997; Kanter, 1993; Missirian, 1982), that is, reaching as high in the organizational structure as possible and amassing power, prestige and money. It is through this accumulation of power and wealth that one's status and identity are established. Also, the organizational entity is perpetuated with the replication of those managers or administrators who have been successful within this environment. They replicate themselves and mold the next managerial generation in their image.

In this traditional model, mentors carefully select their protégés (Astrachan, 1986; Howard, 1988; Kanter, 1993; Kram, 1985) because the "wrong" protégé could have devastating consequences for the mentor (Astrachan, 1986; Eby, McManus, Simon, & Russell, 1998; McCormick, 1991; Ragins & Scandura, 1995). A protégé who does not successfully complete a project, either due to lack of ability or to the subterfuge of other individuals, will irreparably damage the mentor's status and, therefore, her/his power (Astrachan, 1986; Kanter, 1993; Howard, 1988). If a protégé does not conform to the stereotypical and expected characteristics of a successful performer in any specific field, the protégé will be judged more harshly and given less leeway and attribution of success. This is demonstrated in the evaluation of women in general, and minority women and men in particular (Fagenson-Eland, Marks & Amendola, 1997; Allen, Jacobson, & Lomotey, 1995; Allen, Poteet, Russell, & Dobbins, 1997; Astrachan, 1986; Bova, 1995; Cullen & Luna, 1993; Gorena, 1996;

Johnson, Shivers, & Wilson, 1991; McWhirter, 1997; Ramey, 1995; Williams, 1990). Consequently, the mentor chooses someone who shares similar values, background, education, socio-economic status, and life experiences. The mentor will choose someone who resembles self, either psychologically or, perhaps more importantly, physically.

Research begun in the 1980's (Howard, 1988; Josefowitz, 1980; Kram, 1985; Schaef, 1981; Schockett, 1984), reveals that not all people aspiring to professional careers hold such patriarchal values of power and status as demonstrated in the traditional hierarchical structure. Women and minorities are entering the workforce and managerial levels (Kanter, 1993; Senge, 1990; Wheately, 1992) bringing with them different values, attitudes, ideas and experiences (Gorena, 1996; Howard-Vital & Morgan, 1993; Irby & Brown, 1995; Ragins, 1997; Sinetar, 1998). Different modes of interpersonal interaction are also being "introduced" to the previously all white, male work-world. One of the new modes is women's presentation of mentoring behaviors. Women's mentoring patterns or styles are inconsistent with the traditional mentoring model. The traditional model is characterized as a one-to-one relationship that is intensely loyal and of long duration. The women's model of mentoring presents as multiple and simultaneous relationships that are issue or topic focused and of shorter duration than the traditional model (Howard, 1988). Because women's mentoring pattern does not present like traditional mentoring, it is not recognized as such. In fact, many women have difficulty identifying what they are doing as mentoring (Howard, 1988; Schockett, 1984).

Organizational Structures Contributing to Mentoring Models

The traditional work environment is a pyramidal, hierarchical structure reliant on adherence to political manipulations and the template of a mechanistic entity comprised of many components functioning at optimum performance. If, perchance, a compartment of the structure does not function as designed, it is a simple matter to correct the malfunction and the structure will execute its plan once again. This philosophy proceeds from the mechanistic view of the world constructed from Newtonian physics (Wheatley, 1992).

In this worldview, the universe is seen as an elegant and masterful clock mechanism, precisely structured and balanced. Each section of the mechanism is discrete and separate from the other(s) with knowledge and information broken into disciplines and subjects. While functioning together to create a complete organization, each unit executes its own work with little or no interaction and support from other units.

This view of the world necessitates the development of a structured environment that has distinct and unquestionable boundaries. Outcomes of such an entity are predictable and controlled. There is little or no room for spontaneity, individuality and creativity. This "world" is in perfect balance, having perfect precision. It is static environment where change is viewed as an intruder and must be avoided at all costs. This is a linear, hierarchical organization, with strong lines of authority, roles and responsibilities. A competitive environment is created within the organizational entity itself that promotes factionalism, secrecy and "empire building." But this competitiveness also demands that people separate themselves from each other, creating

not cohesive and supportive relationships, but rather loneliness and isolation, living up to the American myth of the "rugged individualist" (Astrachan, 1986; Schaef, 1981; Senge, 1990; Wheatley, 1992).

In this mechanistic world, certain skills and abilities are required to successfully operate within its boundaries. Autonomy is of highest priority. Being self-sufficient (referring to either a department or an employee) is a mandatory value. Although today in many organizations, departments are called to collaborate with other departments or divisions, the strength of autonomy and separate functioning remain very strong. Workers become dispensable resources that can be replaced when worn out, either physically due do age, education and training, or emotionally from stress. Paradoxically, loyalty to the organization is one of the great commandments of this view of the world. Identity comes from the role, position, authority, status and power one holds within the organization. There is no private self, only the self which emerges from the organization (Wheatley, 1992).

To maintain the process of the organization, replication of those specific characteristics and traits that have been shown to be favorable to the continuation of the structure must be assured. To this end, organizations seek, both formally and informally to transmit those important qualities to new, but nearly identical workers. For an individual to be successful in this environment requires acceptance of these qualities and an induction into the value, culture, language and knowledge of the organization.

Therefore, the construct of mentoring becomes extremely important to both the organization and the individual. The model of mentoring which most closely aligns

with this organization is the traditional model. As described earlier, this model is a one-to-one, loyal and of long duration. In an organization that is static, separates knowledge and information into functions that are discrete entities and dissuades change, this model is ideal. It is through this form of mentoring that a close copy, a clone, of the existing leadership hierarchy can be achieved (Senge, 1990).

When executives select their successors, replication theory can come into operation. Similarities such as education, background, culture, race, and gender become important variables. Individuals who have such characteristics are "known" entities, and therefore, they can be trusted, because mentors can see a younger version of themselves in their protégé. The cycle is repeated for each generation of the organizational lifespan.

However, the contemporary American work environments are flattening in hierarchy (Russell & Adams, 1997), offering less job security, but providing opportunities for creative challenges and career entrepreneurialship (Cauldron, 2000; Kanter, 1993: Senge, 1990; Wheatley, 1993). We are entering a new and exciting era that brings with it the need for different ways of viewing and interacting within the work environment, the world and with each other. The rapidly advancing information age demands unusual and creative solutions to problems that have yet to be identified. This requires a diversity of individuals with different experiences, education and backgrounds to work together to find unprecedented solutions. Traditional organizational structure can be a "bureaucratic quagmire" (Lei, Slocum & Pitts, 1999), stifling the creativity, flow of information and both intra- and interdepartmental cooperation.

We are entering a new scientific era, the Quantum Era, that brings with it a new way to view the world. This era has its own rules, just as the Newtonian or mechanistic era. The view of the world coming forth from this new scientific era is called the systems view. This is an opportunity to experience a system that has no set or formulated boundaries (Wheatley & Kellner-Rogers, 1995). It is self-limiting and self-organizing. Where once there were rigid boundaries marking an end and a beginning, this new era is an amorphic state which knows that only in the chaotic, unknown area that creativity is found (Bohm, 1987). The experience at hand will define what is needed (Davies, 1991). This is an adaptive, creative, dynamic reality that is ever co-evolving (Capra, 1982). Each situation, experience or problem may require a new, unique solution drawn from many different sources and experiences. This solution will then create a new environment (Wilber, 1990).

It carries with it the ability to respond to changes or nuances that occur in any part of the system. This is quite a different effect than in the past era. The interconnected dimension of this view mandates that any event in any part of the entity will manifest, in some way, in another part of the entity. Scientists speak of the "Butterfly Effect," e.g. a butterfly flaps it's wings in Brazil and it creates rain in New York City (Bohm, 1980). It is this interrelated and interconnected aspect of our universe that requires dynamic responses and reminds us that we cannot exist isolated from others.

As with the Newtonian scientific view, the Quantum view of the world has begun and will continue to impact our social structures and the values and skills that will be required in such a new age. Our organizations are beginning to exhibit a

flattening of hierarchical structure. We must search for new ways to work and interact within these new structures. An experience at one segment of the structure will manifest in another part (Wheatley, 1993).

The skills that will be valued in these new organizations are vastly different from those in the era we are leaving (Cauldron, 2000; Lei, Slocum & Pitts, 1999; Wheatley & Kellner-Roger, 1995). Because the new science brings with it new ways of interacting, relationships and cooperation are of the highest importance. Each cooperative group will be empowered to define, redefine and shape the manner and function of the group while developing uncommon responses and solutions to reach its stated goals. This will require a diversity of experiences, personal, professional and educational, to adapt to the ever changing environment.

How then will new workers be oriented to the organization? Mentoring will still be one of the most valued modes of conveying the philosophy of the organization. But what form or model of mentoring will be used?

Searching for "new " ways to transmit the culture, values and knowledge of the organization, to replicate management in order to sustain the life of the structure, may lead to overlooking that which has always been available. Women's mentoring patterns arise from their socialization (Howard, 1988). Girls are taught that relationships are important, sharing is highly valued, and by communicating not only thoughts but also feelings (Gilligan, 1982). Girls are also taught not to speak highly of themselves, this would become conceit; not to outshine their peers nor draw undue attention to themselves (except for physical beauty or sexual attraction); that they are not capable of advanced intellectual endeavors; not to overshadow boys, for they will

not choose you as a mate (Belenky et al.., 1986; Gilligan, 1982; Gordon, 1991; Schaef, 1981). Consequently, women hide their skills and their abilities for the mentoring process and call it talking to friends, getting advice, seeking help, having coffee or doing lunch. They reject the implication of hierarchy, power and status. Little girls are not encouraged to compete, or work for the betterment of the team, all the while strategizing to become captain. However, the form of their mentoring relationships is exactly that for which business futurists are calling (Lancaster, 1997).

Because of the theorized nature of women's mentoring styles and patterns, they can accommodate the changing work environment. Work efforts are now being designed around cross-departmental teams and projects (Caudron, 2000; Bennis & Biederman, 1997; Wheatley, 1993; Senge, 1990). This demands a more collaborative working relationship with less competition. Interpersonal skills are now being touted as "the" managerial skill (Senge, 1990) of the future. The shorter length of women's mentoring patterns aligns with the short length of employment tenure that organizations are now offering. Because of rapid employee turnover, the luxury of a long-term mentoring relationship is not viable. Therefore, the ability to access support and knowledge-sharing from several individuals concurrently is optimal.

Women Mentoring Women

That mentoring is an important factor in personal and professional growth cannot be disputed (Ballin & Vincent, 1995; Bell, 1996a, 1996b; Bierema, 1966; Blunt, 1995; Caravalho & Maus, 1996; Enscher & Murphy, 1997; Grubb, 1996; Harloe, 1995; Howard, 1988; Kram, 1985; Kanter, 1993; Marsicano, 1981; Missirian, 1982; Ragins, 1997a; Ragins, 1989). But assuming that both men and women can be mentored or be

mentors in the same way may be a disservice to both sexes. Studies have shown that same sex mentoring relationships, especially for women, are most effective and important for the professional, personal and emotional development of the protégé (Gaskill, 1991; Keyton & Kalbfleisch, 1993; Lewis, 1995; Missirian, 1982; Myers, 1996; Ragins, 1989; Townsend, 1995). There are several reasons for this. First, women who have succeeded in achieving management level positions have experienced the political and organizational barriers that impede women's advancement (Ibarra, 1993; Irby & Brown, 1995; Kanter, 1993; Keyton & Kalbfleisch, 1993; McCormick, 1991; McWhirter, 1997; Moore & Sangaria, 1979; Schaef, 1981; Schockett, 1984). Second, senior women can provide a role model for their protégés in areas not directly job-related, such as, dealing with multiple roles (executive, partner, parent, caretaker, etc.), or relationship issues with spouses or partners. Third, women approach mentoring far differently than men (Cox, 1992; Didio, 1997; Egan, 1996; Gordon, 1991; Grub 1996; Howard, 1988; Shakeshaft, 1987). Their socialization and developmental processes have been shown to differ from men's. Piaget (Miller, 1993), when researching moral development in children, noted that when playing, boys would add layers of "rules" to protect the continuity of the game. Girls, on the other hand, would cease game playing if the rules interfered with or caused a disruption to relationships (Miller, 1993). Fourth, women perceive traditional mentoring relationships as more difficult to achieve [than men] (Baugh, et al., 1996; Ragins, 1989). Fifth, women have limited access to mentoring relationships through the established networking systems (Ibarra, 1993; Noe, 1988).

Therefore, a mentoring program that does not take into account women's relational and socialization styles, e.g. relationship patterns, stereotypical social/cultural roles and female cognitive and emotional developmental processes, will not provide the experiences and support that women protégés require. In their 1997 study, Burke and McKeen speculated that "women may benefit less than men from mentor relationships" (p. 56). However, when their researched is reviewed, the mentoring relationships in which these women were studied were defined along the traditional male model, with traditional male reward, that is, job advancement, as the measure of success. It may be questioned if the definition of mentoring used had been more in line with a female defined model, with a successful outcome more in line with a woman's identification, would the researchers have arrived at the same conclusion.

A male same-sex mentoring relationship is characterized as one-to-one and intensely loyal (Twale & Jelinek, 1996). This is not the case for female same-sex mentoring relationships (Gupton & Slick, 1996, Howard, 1988; Shakeshaft, 1987; Schockett, 1984). Women, in fact, may not use the term mentoring to describe this relationship. They may say they are being helped, guided, supported or counseled. Also, women tend to have concurrent multiple mentors, each providing an aspect of professional or personal development (Howard, 1988). For women, when the "supporting" association is completed, the relationship easily evolves into another form, for example, collegial peer or friend (Shakeshaft, 1987). The termination of the male mentoring relationship is precipitated by a "crisis" in which the protégé recognizes that s/he has out grown the mentor and must leave the relationship in order to continue to develop.

If different concerns and needs of women in mentoring relationships are not addressed, women are effectively forced to embrace a male model of development with the implication that women's interpretation of mentoring is less than adequate or appropriate. Then, like Athena, women must become "male" in order to gain *overt* responsibility, recognition and respect.

Limiting Factors in Women Mentoring Women

Despite the advantages to women mentoring women, there are several factors what undermine opportunities for the development of these mentoring relationships. Perhaps the most critical facts is a dearth of women mentors (Carruthers, 1993; Allen, et al., 1997; Bierema, 1996; Bova, 1995; Clemmons, 1995; Collingwood, 1996; Didio, 1997; Enscher & Murphy, 1997; Hepner & Faaborg, 1979; Holt, 1981). The reasons for the limited availability of women mentors are as follows:

(1) Time Factor: Women who have risen in their organizations or fields to positions of authority, responsibility and power have precious little time to spare to become a mentor. The amount of time and energy required of these women to achieve and maintain upper management or administrative positions, over and above the expectancy of their male counterparts, does not permit them the luxury and benefit of providing on-going mentoring for other women (Apter, 1993, Howard, 1988).

(2) Queen Bee Syndrome: Some women who have reached or exceeded their expectations professionally through their own efforts, are reluctant to assist new-comers to their field or organization. This may be prompted by an attitude that these novices can and should struggle as they had; or, the potential protégé is seen as a threat and competition (McKenna, 1997).

(3) Scarcity: In most fields, there are just too few women in senior positions to assist all those women who would like to be mentored. According to McElhiney (1990) "The problem is that only approximately two percent of the people at the top of most corporations, organizations, and institutions are women. (p. 21)."

(4) Uncertainty: Many women, who would be excellent mentors, feel that they lack the necessary qualifications to be a mentor. They are concerned that they do not have the experience to provide productive and beneficial guidance to other women (Ibarra, 1993; Kanter, 1993; Howard, 1988).

These are strong factors that inhibit mentoring relationships between women and are the results of socialization practices. Women have been "taught" that it is their role or function in our society to nurture and take care of others, putting others before self. Also, situations are created between women that result in a competitive air for presumed limited resources (e.g. men, jobs, financial security, etc. (Holt, 1981; Howard-Vital & Morgan. 1993; Hubbard & Robinson, 1994; Jordon, 1997; Kaye & Jacobson, 1996; McCormick, 1991; Ragins, 1997a; Ragins, 1997b; Ragins, 1989; Sinetar, 1998).

Barriers to Cross-Sex Mentoring Relationships

Cross-sex mentoring relationships are vulnerable to a number of challenges. Since this form of relationship is one of personal and professional growth, the mentor and protégé will spend considerable time working with each other. Both the mentor and the protégé are selected because they possess certain characteristics, abilities, statues, power, etc., which are highly esteemed (Allen, et al., 1997; Anspaugh, 1997; Astrachan, 1986). Others within the organization or institution may be envious of the exposure the protégé receives, the opportunities being presented, or the relationship itself. Spouses

may also feel threatened by the close interaction (Josefowitz, 1980; Ramey, 1995; Schaef, 1981). In fact, a more intimate relationship may develop (Enscher & Murphy, 1997; Caruso, 1992; Gaskill, 1991).

A male mentor may resist working with a female protégé because of the detrimental impact it may have on his own career. The societal norms which delineate the so-called men's and women's work roles also are manifested in a cross-gender mentor relationship. Women are perceived, whatever their occupational level, to be of lower status and less competence. A woman protégé can be viewed as a hindrance to the mentor's own career (Kanter, 1992; Shakeshaft, 1987).

There is yet another reason why men, at times, are reluctant to mentor women, indeed, a more profound and psychological reason. When women's achievements are compared to the male *myth* of success rather than to the male *reality*, men must confront the fears that they hide from themselves—the fear of failure, the fear of success, the fear of competition (Astrachan, 1986). And with this, men must acknowledge that, in their fears, they more closely resemble the *myth* of the helpless and dependent female (Astrachan, 1986; Kanter, 1992).

Mentoring and Minority Women

Our organizational structures, including those in higher education, have been constructed with adherence to the white male values of patriarchy and hierarchy (Bova, 1995; Kanter, 1993), competition and a focus on personal ambition (Gorena, 1996). The glass ceiling is supported by the "good old boy network" and all women confront these barriers to career advancement. This structure rarely acknowledges the different experiences and backgrounds that women and minorities bring to the workplace

(Keaveny & Inderrieden, 1999; McWhirter, 1997; Desjardins, 1996). As Cullen and Luna (1993) note, "The organization sees no value in promoting diversity in the upper ranks and provides little resource or commitment to women's [or minority's] development" (p. 133). The system is designed to maintain the status quo (of the workforce) by replicating those in power (Kanter, 1993, Senge, 1990). Those individuals at high level managerial and administrative positions (usually white males) will generally select someone similar to themselves (usually white males) in areas such as education, culture, social and race (Allen, et al., 1997; Astrachan, 1986; Kanter, 1993).

White males in position to become mentors are reluctant to establish this relationship with women and with minorities (Caravalho & Maus, 1996; Caruso, 1992; Wiltshire, 1998; Kanter, 1993). The protégé is a reflection of the mentor. When the protégé is successful, the mentor is successful. However, if the protégé fails at a task, the mentor's reputation suffers the consequences (Kanter, 1993; Astrachan, 1986). Since the stereotypic attitudes of white males towards women and minorities are not always positive and supportive, a potential mentor is wary about risking his reputation on an unknown factor (Allen, et al., 1997; Bova, 1995; Kanter, 1993). In fact, subconsciously (or consciously) the white mentor may actually subvert the productivity of the woman or minority protégé (Astrachan, 1986).

Women and minorities need to have reflections of themselves for mentors (Allen, et al., 1995; Williams, 1990; Johnson, Shivers, Spencer, & Wilson, 1991), that is, individuals who share similar experiences, knowledge bases and worldviews. This, unfortunately is not always possible. There are just too few women and minorities at

senior levels to mentor everyone who should be mentored (Cullen & Luna, 1993; Johnsrud, 1991). However, given the emerging mentoring model, a woman's presentation of mentoring may provide a partial solution to this problem.

Within the framework of multiple mentors assisting with different issues, one protégé can optimize the information needed to secure career advancement. Drawing from diverse cultures, values, educational backgrounds and life experiences, from both men and women, gives the protégé an opportunity to view and possibly understand the language, culture and values of an organization, which is the main function of any mentoring relationship. This can work for all women; however, minority women have distinct needs that must be addressed.

Minority women must manage racial stereotypes. For example, an assumption about Hispanic women is that their focus is directed to family needs and responsibilities (Gorena, 1996; Ibarra, 1993). While many Hispanic women express the importance of their families, they also indicate that their careers are also important (Gorena, 1996). However, the traditional mentoring model does not allow for divided priorities. Implicit within the male model is the assumption that career and family issues are mutually exclusive and that career is the first priority. It is also assumed that there is someone else to take care of family concerns. There is a stereotype of the African American woman that presents her as a compassionate, loyal subordinate, and a pillar of strength, albeit, incompetent (Ramey, 1995). In many organizations, the assumption is that these women are in their positions because of affirmative action, not because of their abilities, knowledge and skill.

The issues of gender and race impact all minority women. Ramey (1995) indicates that African American women identify racism and sexism as barriers to career and professional development. This is also the case for Hispanic women (Gorena, 1996; Bova, 1995). For many minority women, the two issues are so intertwined that it is often impossible to differentiate them. This situation begs the question, "Are minority women best served when mentored by a woman of the same race or ethnicity?"

The emerging mentoring model may alleviate a portion of this problem for women of color. Being able to draw from several resources for topic-focused information allows minority women, and all other women, to find the necessary support and assistance they require without being subjected to the relationship exclusivity that is inherent in the traditional model.

Women's Mentoring in Higher Education

The primary venue for research on mentoring relationships has been the private sector, that is, within business and industry (Ballin & Vincent, 1995; Blunt, 1995; Caldwell & Carter, 1993; Eagly, 1978; Kanter, 1993; Ragins, 1989). The hierarchical structures of these organizational entities provide the functional arena for the demonstration of a mentoring relationship (Astrachan, 1986: Kram, 1985). The needed components of ambition, status, interest, power, attainment and role models are abundant and help to fulfill Erik Erikson's seventh developmental stage of generativity (Astrachan, 1986; Ragins, 1997a; Ragins, 1997b). This stage constitutes the fruition of generational replication, of maintaining a constant source of successors and the continuance of the organizational entity (Perlmutter & Hall, 1992).

But, what of other institutions and their organizational structures within our society? How, for example, are the culture, knowledge and characteristics of our institutions of higher education passed on to succeeding generations of administrators? Are these new administrators simply clones of their predecessors?

Historically in the United States, colleges and universities developed to provide the country with political and religious leaders. They are institutions designed by and for white males (Gutek, 1991). During the 19th century, when women wished to pursue an education, they were permitted to attend "ladies' seminaries." These seminaries were not degree granting institutions, but places where women could pursue knowledge. When women were admitted to traditional established colleges and universities, their professors and the administrators were men (Gutek, 1991). As women became integrated into the higher education institutions, the majority, by far, of their role models were men (Astin & Leland, 1991; Murphy, 1997). While the institutions permitted women to enter through the portals, the institutions themselves did not adapt the organizational structure to accept these women (Astin & Leland, 1991; Glazer-Raymo, 1999; Gutek, 1991)

Without alteration of the structure of the educational institution, the mode of curriculum delivery or course content, women were purposefully directed to "women's" programs and occupations—elementary school teaching, nursing, secretarial sciences, home economics, etc.—areas that maintained the social and cultural structure of the dominant majority and perpetuated gender stereotypes (Astin and Leland, 1991; Gutek 1991; Shakeshaft, 1987; Shelburn & Lewellyn, 1995). With few women at executive officer levels, women students did not have the role models or support to aspire to or

even consider careers in higher educational administration and leadership (Astin and Leland, 1991; Glazer-Raymo, 1999; Swoboda & Vanderbosch, 1986; Knudson, 1986; McNeer; 1986).

In the late 19th century and early 20th century, a new form of institution was established—the two-year college. The impetus for the development of the two-year college came from two areas: many administrators of universities believed that the first two years of undergraduate curricula were more appropriate to secondary rather than higher education, and high school administrators wanted to provide advanced instruction for their students (Gutek, 1991; Thornton, 1966). While two-year colleges, called junior colleges, afforded women a greater opportunity for education, they were primarily designed to present male students with vocational and professional training (Gutek, 1991; Shakeshaft, 1987; Tedrow, 1999; Touchton & Shavlik, 1978).

Enrollment of women students in higher educational institutions has significantly increased over the past three decades. In 1977, the total enrollment of women in both public and private colleges and universities was 5,496,771 (Digest of Education Statistics, 1980), which was approximately 48 percent of the total student enrollment (full- and part-time). In 1997, the number of women enrolled in both public and private colleges was 8,106,306 (Digest of Education Statistics, 1999), or approximately 58 percent of the total student enrollment (full- and part-time). This is an increase in women's higher education enrollment of approximately 30 percent within a 20 year period.

During this same time period, the number of women in executive/ administrative/managerial professional positions in both public and private colleges and

universities increased from a total of 26,929 in 1978 (Digest of Education Statistics, 1980) to 61,758 in 1998 (Digest of Education Statistics, 1999), an increase of approximately 43 percent. However, averaged over the twenty-year period, this amounts to an increase of only about two percent per year.

The need for women to mentor women in higher education begins at the student level. Although women have made significant strides during the past several decades in gaining admission to institutions of higher education and degree programs traditionally deemed male territory, they still experience discriminatory practices once enrolled (Heinrich, 1995; Stage & Maple, 1996; Shelburn & Lewellyn, 1995; Smith, 1995). Oftentimes these practices are not conscious or premeditated, but they still have debilitating effects on women. In an effort to "protect" women students, their advisors and faculty may direct them to degree programs and careers that are seen as more "appropriate" occupations (Heinrich, 1995; Hubbard & Robinson, 1994).

In her research on women in higher education, Freeman (1989) introduced the concept of "the null educational environment." This is an environment that neither encourages nor discourages women. Basically, it just ignores them. In an educational environment, this may mean that women students do not receive academic, financial or emotional support for their career goals to the same degree that male students receive such support (Glazer-Raymo, 1999; Golde, 1994; Green & Bauer, 1995; Hall & Sandler, 1983; Marsicano, 1981). Taken further, without such support, advice, or counseling, women do not view higher education administration as a welcoming profession. In the absence of appropriate mentoring by women who are in institutional administration, potential protégés may not consider this professional field as a suitable

or reasonable career path (Astin & Leland, 1991; Finlay & Crosson, 1981; Glazer, 1991; Ramey, 1995; Tedrow, 1999; Twale & Jelinek, 1996; Twombly, 1995;)

Mentoring is considered a critical aspect of professional development and advancement, (Myers, 1995; Grubb, 1996; Hunsaker, 1988; Marsicano; 1981; Ruhe & Allen, 1997; Szymborski, 1996; Vincent & Seymour; 1995). It provides several benefits for the protégé: sponsorship for promotions, opportunity to learn the organizational culture, opportunities for challenging projects and assignments, exposure and visibility to management, etc. (Kram, 1985). This relationship also provides the organization with benefits. Protégés are generally better-educated, less mobile, and more job satisfied (Noe, 1988). In their research, Hunsaker and Hunsaker (1991), report that the women respondents identified mentors as helpful in the following ways:

1. Teaching them how to deal with male counterparts
2. Developing their knowledge of the industry
3. Recommending them for promotions
4. Encouraging them to strive for higher goals
5. Introducing them to corporate politics
6. Providing constructive criticism
7. Advising them on their work and enhancing their self confidence
8. Helping them cope with others' resentments and discrimination
9. Pointing out their positive attributes to others
10. Sticking out their own neck to promote the protégées
11. Helping them overcome discouragement
12. Insuring them to be more creative

13. Keeping their performance visible to senior management

14. Giving them credit for their work (p. 105).

The need for women to participate in mentoring relationships as both protégées and as mentors is significant because the protégée receives considerable benefit from this relationship, as does the organization or institution (Anderson, 2000; Burke & McKeen, 1997; Clark & Corcoran, 1986; Collingswood; 1996; Mosley, 1980; Ragins, 1997a). But, what of the mentor? What does the mentor "get" from this relationship? The benefits that accrue to a mentor include the development of higher-level managerial skills, exposure within the organization, and the opportunity to enhance status and position (Kanter, 1993; Kram, 1985; Kram, 1983; Missirian, 1982).

Problem in Perspective

With so few women at the upper levels of higher educational administration, neophytes to administration are likely to have difficulty identifying a woman as a professional mentor (Benisom, 1989; Clark & Corcoran; 1986; Cullen & Luna, 1993; Glazer, 1991; Glazer-Raymo, 1999). Because of this deficiency, women continue to be mentored by men. This is not to imply that men who are willing and actively mentor women into the administrative realms of higher education are not welcomed and significant. However, when men mentor women, certain important characteristics and values that have been defined as "feminist leadership attributes" (Helgesen, 1990) are not passed along. These characteristics have been identified in the work of Gilligan (1982) and Belenky et al.. (1986). Feminist leadership attributes include collaboration, caring, courage, intuition, and vision (Regan & Brooks, 1995). In contrast, male leadership characteristics are described as analytic, goal oriented, competitive, identity

and status seeking, autonomous and oppressive (Desjardins, 1996). Consequently, some researchers view men's and women's leadership and work styles as opposites. For example, Mintzberg (1978) and Helgesen (1990) contrast women's and men's work and leadership styles as follows:

Men's Leadership/Work Styles[a]	Women's Leadership/Work Styles[b]
• Work at an unrelenting pace with no breaks in activity during the day.	• Work at steady pace but with small breaks scheduled in throughout the day.
• Work days were characterized by interruption, discontinuity and fragmentation.	• Do not view unscheduled tasks and encounters as interruptions.
• Spare little time for activities not directly related to their work.	• Make time for activities not directly related to their work.
• Exhibit preference for live action encounters.	• Prefer live action encounters, but scheduled time to attend to mail.
• Maintain complex network of relationships with people outside their organizations.	• Maintain complex network of relationships with people outside their organizations.
• Immersed in day-to-day need to keep the company going they lacked time for reflection.	• Focus on the ecology of leadership.
• Identify themselves with their jobs.	• See their identities as complex and multi-faceted.
• Have difficulty sharing information.	• Schedule in time for sharing Information.

[a](Mintzberg, 1978)
[b](Helgesen, 1990)

A characteristic that men and women share is maintaining a network of relationships internal and external to their organizations. However, it is in how these relationships are maintained that contrasts in women's and men's leadership styles are revealed.

Women in Academic Administration

The barriers to advancement and to the development of mentoring relationships for women in higher education are consistent with those in business and industry. The organizational structure, gender stereotyping, organizational philosophy and culture and gender expectations (Bensimon, 1989; Glazer-Raymo, 1999; Luna & Cullen, 1990; Ost & Twale, 1989; Tedrow, 1999; Kanter, 1992) follow similar patterns with similar outcomes for women in either business or education.

Today, approximately 56 percent of all students enrolled in colleges and universities are women (Digest of Education Statistics, 1999); however, women represent only 15 percent, or 453, of CEO's at the 3000 regionally accredited colleges and universities (Glazer-Raymo, 1999). According to the American Association of Community Colleges (2000), there are 1132 community colleges. This figure includes public, independent and tribal institutions. The number of women CEO's at community colleges is higher than the national average, 290 or 25.6 percent (National Institute for Leadership Development,2000), but this is not equivalent gender representation.

Women students are told that they have great opportunities ahead of them, that they can achieve great success. When they look at the executive level administrative personnel on their campuses, they receive another message. And these messages are not just relegated to post-secondary institutions. Women may dominate the teaching ranks from kindergarten through 12th grade, while it is men who hold most of the principle and superintendent positions (Glazer, 1991). In higher education, women predominate at entry and mid-level administrative positions and men are the deans of professional schools (Glazer-Raymo, 1999).

Research indicates there has been a significant increase in the number of women at entry and mid-level administrative positions (Digest of Education Statistics, 1999/1980; Touchton & Shavlik, 1978), however, the representation of women at the executive level of administration, although improving, is still not adequate. Educational organizations still reflect traditional male structures and philosophies creating gender barriers inhibiting women administrators' ascent to the executive administrative ranks (Astin & Leland, 1991; Faulconer, 1995; Johnsrud, 1991; Koerner & Mindes, 1997; Shakeshaft, 1987; Swobada & Millar, 1986). Kempner (1989) observes that, "It is apparent that women, minorities and others who do not share the physical, social and cultural attributes of those who currently predominate in educational administration do not find easy access to the castle [of administration] (p. 120.)" The theory of replication, appears to apply to academe as it does in other professions or industries.

The "professional ideal" in education still embodies those values generally associated with masculinity—those values which perpetuate segregation, subordination and exclusivity (Glazer-Raymo, 1999). Because of this, mentoring plays a highly important function in the career development of women aspiring to executive level positions in higher education. Several researchers have suggested that women in academic institutions avoid traditional [male] mentoring relationships (Hall & Sandler, 1983; Kram, 1983; Nicols, Carter & Golden, 1985), but rather seek out "alternatives such as peer pals, collegial networks and other developmental relationships (Johnsrud, 1991, p. 9). This pattern is consistent with what is considered the female mentoring model.

Mentoring relationships for women in higher education can facilitate their quest for advancement and for balance in their lives. By offering support to those that come along after them, women who are currently in executive level positions can provide the guidance and nurturance required by women in entry or mid-level positions for advancement. Rather than having only the leadership model of the "great man" with values, characteristics, skills and abilities defined in masculine terms (Twombly, 1995), women can provide an alternative model that is inclusive, intuitive and based on connectedness.

Theoretical Basis for Women's Cognitive Development

Belenky et al.. (1986) journeyed into a domain newly opened by Carol Gilligan (1982). These researchers explored *women's* cognitive development as Gilligan had explored women's moral development. These studies were undertaken to examine differing modes of understanding and development that women and men may present.

Interviewing women from various backgrounds, ethnic groups, ages, classes and educational levels, Belenky et al.., identified five perspectives from which "...women view reality and draw conclusions about truth, knowledge and authority (p. 1)." These perspectives, or epistemologies as the are termed, women's cognitive development from being silent with no voice, to having an integrated and cohesive demonstration of self-confidence, empowerment and worldview.

The first developmental level is known as "silent." Women in this category have not been silenced, but have yet to find their voices. According to Belenky et al.. (1986), these women do not cultivate their capacities for representational thought or explore the power that words have for expressing thought. This difficulty in finding

words is reflected in their relationships with authority. These women see authority as all-powerful and overpowering. To be safe, they must obey authority unquestioningly and depend on authority to provide direction and understanding of the world and a woman's place in that world. These women are often labeled as immature, impulsive and hyperactive.

The second epistemology is known as "received knowledge." The women in this category learn by listening (Belenky et al.., 1986). They hear others' ideas and concepts and accept them as truths that are concrete and dichotomous. They assume that there is only one right answer to a problem and that all other answers are incorrect—and this correct answer will come from others, not themselves. The women at this level believe that the experts (authority figures such as ministers or teachers) know and that their knowing is correct. They do not realize that the knowledge the authorities are presumed to hold can be constructed or self-generated. To the received knower, there are no gradations of the truth, there are no gray areas; an idea or concept is all correct or it is totally worthless (Belenky et al.., 1986). One way these women negotiate their environment and their place in this environment is by strict adherence to gender role stereotyping. This annuls the ambiguity of their place in the world. A voice that emerges from this group is one of "selflessness" (Belenky et al.., 1986). Their devotion is to the care of others, not for personal fulfillment.

The next developmental level moves women away from silence or an external, but not self, authority. This change does not completely abolish the dualistic thinking of the received knower, but shifts the perspective of authority to the self, or as Belenky et al.. (1986) states, "Women become their own authorities (p. 54)." It is within this

stage that women come to rely upon their intuitive processes and begin to find an inner source of strength, confidence and autonomy.

The subjectivist epistemology marks the passage from a silent, passive receiver of knowledge, dependent on external authorities to an individual who is no longer willing to simply accept as truth or even fact, that which comes from a powerful or higher status individual. At this stage, women begin to listen to themselves and begin to gain their own voice. However, they also reject that which they perceive to be a means of domination. As Belenky et al.. (1986) observe, "Some women become almost word-phobic and will even classify the written word as an instrument of oppression that has too often been used against them...subjectivists often prefer to express themselves nonverbally or artistically so as to bypass the categorizing and labeling that the use of language implies (p. 74)." Because of this, subjectivist women may appear to be "arbitrary, emotional, overly personal, concrete and unmanageable (Belenky et al.., 1986, p. 74)."

As Belenky et al.. (1986) conclude that, not all women move to the next epistemology, procedural knowledge. Why some women do not make this transition is not fully understood, but what is known is that their "old ways of knowing" were challenged. Women who do transit into the procedural epistemology have come to the awareness that knowledge is a process, that there can be multiple truths and that intuition may not always be right. It is in this stage that there is importance to not just what people know, but "...how they go about forming their opinions, feelings and ideas (p. 97)."

There are two apparent presentations of procedural knowledge: separate knowing and connected knowing. Separate knowers, in one sense, may appear to be conventional women conforming to the expectations of those in authority in their lives (parents, teachers, etc.); however, they breach conventionality in their rejection of feminine stereotypes. In order to be taken seriously academically and professionally, these women display disinterested reason, tough-mindedness and forcefully repress feelings and emotions. They assume the behavior and characteristics of the men that they see around them. For example, Helgesen (1990) describes the family background of the 1980's executive women. These women identified with their successful fathers. To please and emulate these all important male authority figures while growing up, these women achieved academically, usually participated in sports and rejected the gender role as presented by their (usually) stay-at-home mothers. As young adults, beginning their professional careers, these women would turn to their fathers for advice in career development and advancement. They remained distant, almost aloof, and shielded themselves from emotions and feelings.

The connected knower, on the other hand, begins with an interest in the facts of peoples' lives and then centers on the way people think. Separate knowers learn through explicit instruction. Connected knowers learn through empathy (Belenky et al., 1986). However, "as with all procedural knowing, it is the form rather than the content of knowing that is central (Belenky et al.., 1986, p. 115)." Procedural knowledge orients toward the object not the knower. Belenky et al.. (1986) utilize the Piagetian construct of accommodation to describe both the separate and connected forms of procedural knowledge. Knowers try to understand "the others'" ideas and thinking in

terms of how that individual thinks rather than in terms of how the knowers understands.

Procedural knowers according to Belenky et al.. (1986) are like "chameleons." They reflect the environment or structure in which they are involved. They detach themselves from relationships (personal or professional), subsuming their own "self" to mirror the authorities around them.

The final epistemology is constructed knowledge. The constructed knowers integrate intuitive knowledge which they feel is important and knowledge which they have learned from others (Belenky et al.., 1986). They do not dismiss or reject past knowledge, but are aware that there are other perspectives and contexts that must be considered. These women will relinquish dichotomous thinking so common in the earlier stages of their cognitive development. They accept and even embrace a "high tolerance of internal contradiction and ambiguity (Belenky et al.., 1986, pg. 137)."

Unlike the silent, received, subjectivist or proceduralist, the constructivist accepts the many aspects of herself, develops her own voice and understands life's complexities. Rather than following the male model of compartmentalizing the various parts of self (home, work, relationships, play), the constructivist uses self to mediate and compose knowledge (Belenky et al.,, 1986). The process of learning and of knowing becomes a passion, as does the "never-ending search for truth." Women in this epistemology do not view knowing as objective, but rather a way of incorporating their passions and intellectual self into a cohesive being (Belenky et al.., 1986).

Egan's Theory

Egan indicates (1996) that, "mentoring functions recognized and valued by the woman [protégé] will depend upon her worldview (p. 421)." Successful mentoring relationship requires the mentor to identify the protégé's worldview and her way of learning. The mentor can then present guidance, learning experiences, projects and challenges in ways that the protégé can identify and accept (Egan, 1996).

For example, a Constructivist will purposefully seek out mentors "in all guises," as role models, consultants, either younger or older, the same or difference race and gender (Egan, 1996). According to Egan (1996), a Constructivist is the model for mentoring success. The Constructivist can integrate her own experience with objective reality and can best put the system to her own use (Egan, 1996). The Constructivist is most likely to select a mentor who is similar in intelligence, ambition and education. When working with a Constructivist protégé, the mentor must realize that the relationship is likely to occur on the Constructivist's terms and according to the Constructivist's agenda for working inside or outside of the system (Egan, 1996). The Constructivist wants the mentor to coach, counsel, advise and define what needs to be done to be successful (Egan, 1996).

A Proceduralist is not likely to have a mentor because she will not actively seek one (Egan, 1996). However, later in her career, a Proceduralist may come to regret her "unwillingness to relate to someone who could have been her mentor (Egan, 1996, p. 421)." The Proceduralist is successful by following the rules and working hard. The Proceduralist resists yielding to role modeling because she believes she should be the model (Egan, 1996). The workplace is viewed as favoring men and women are seen as

antagonists (Egan, 1996). A Proceduralist is dedicated to her career and will place it before relationships. Although a Proceduralist may not want a mentor, she is the type of protégé that many mentors seek out. The hard work and dedication demonstrated by a Proceduralist reflects positively on the mentor. Through the efforts of the protégé, the mentor gains in status, prestige and power (Egan, 1996; Alleman & Newman, 1989; Astrachan, 1986). A Proceduralist will accept mentoring if it is framed as an exchange of information between peers with the mentor providing guidelines leading to a goal (Egan, 1996).

The respondents for both the Egan study and the current study were drawn from national organizations. Egan's study was conducted with members of the American Women in Radio and Television (AWRT). The current study was conducted in conjunction with the National Institute for Leadership Development (NILD). The Institute can be described as a national organization for women administrators in higher education, primarily in community colleges.

There are several differences between Egan's study and this study. The obvious difference is the professional fields from which the participants were drawn. The Egan study was conducted over the course of two years in the broadcast industry with subjects who were in occupational levels from sales positions to general mangers. The total number of responses for this study was 454, for a response rate of 35%, and the responses were not anonymous. Returned surveys were monitored so duplicate surveys would not be sent in subsequent mailings. There was a total of three distributions of the survey by both mail and fax.

The survey for the current study was sent to the 290 women CEOs at community colleges. One mailing was done and 118 responses were received, for a response rate of 40%. This study was completed in less than one year. Unlike the Egan study, this research was done anonymously. It was thought that, given the limited number of potential respondents, the anonymity of responding would result in a greater response rate.

The demographic questions of the survey were modified to reflect the realities of higher education. Questions pertaining to ownership and income in the Egan study, were changed to typify educational environments such as: FTE, location of school, tenure as senior administrator, and tenure in current position.

Statistical analysis differed in the two studies. In Egan's study, three epistemological clusters were identified through the factor analysis, therefore, an ANOVA was used to analyze data. In the current study, only two epistemological clusters were identified through the factor analysis, therefore, t-tests were used to analyze the data. Also, phone interviews, which were part of Egan's study, were not included in the current study due to time and resource constraints. Certainly, these differences in the Egan study and the current study probably account for inconsistencies in the findings of the two studies.

Purpose of this Study

The purpose of this exploratory study is to assess the generalizability of Egan's mentoring theory to occupational fields other than broadcasting and to women of color. The current study is conducted in the field of higher education, with women chief executive officers of community colleges (CEOs). The sample includes women of

color and white women who are CEOs of community colleges. The following questions guided this exploratory study:

1. Into which epistemological level do women Chief Executive Officers (CEOs) of community colleges primarily occur?
2. How were women CEOs of community colleges mentored during their professional development?
3. Do women of color, who are CEOs of community colleges, show a similar pattern to white women in these positions, in terms of past mentoring experiences and epistemological levels?
4. Are the experiences of women of color with mentoring positive and constructive?

CHAPTER THREE

METHODOLOGY

The current study extends the research on women's mentoring styles and experiences begun in the 1996 study by Egan that attempted to specify women's mentoring styles utilizing Belenky et al.'s (1986) theory of women's cognitive development. The current study was undertaken to determine if Egan's theory and related classification levels of women's mentoring is generalizable to another profession and to different groups of women.

Respondents

The respondents in this study are a self-selected, group of women from the entire population of women in Chief Executive Officer (CEO) positions at community colleges throughout the United States. In most instances, the title of the chief executive officer is president. However, in several instances the title of chancellor, provost, executive dean and campus dean are used. Therefore, the functions and responsibilities of the position, rather than the title, were used to identify the respondents as CEOs. For the purpose of this study, the working definition of a chief executive officer is the position that holds ultimate administrative responsibility for the functioning of the campus.

The research instruments used in this study were mailed to 290 female community college CEO's. This is the national population of the chief executive officers at community colleges who are women. The mailing list was obtained from the National Institute for Leadership Development. The Institute was established approximately 20 years ago to provide women administrators and those who aspire to be administrators with training, support and a networking system. Since its inception, approximately 4,000

women have participated in the Institute's seminars and workshops. Approximately 80% of the women who hold CEO positions have participated in the training provided by the Institute.

The Egan survey instrument (see Appendix A) was mailed along with a cover letter (see Appendix B), and an addressed, stamped return envelope. The cover letter for this project was developed in conjunction with the National Institute and was co-signed by the president of the Institute and the researcher. This was done to maximize the questionnaire response.

Instrumentation

The instrument used in this research to assess respondents' epistemological level and mentoring experiences, was designed by Egan (1996). It is comprised of 70 questions that are divided into two sections. The first section has fifty-eight questions elicit information for categorization of the respondents into the epistemologies. Questions 1 through 36 and 46 through 55 are in a 7 point Likert format with the possible responses ranging from 1=strongly disagree to 7=strongly agree. Questions 37 through 45 are in a 9 point Likert format with possible responses ranging from 1=most important to 9=least important. The second section contains 12 questions eliciting demographic information (see Appendix B).

The questionnaire was used to measure the women's ways of knowing, based upon responses to a twelve-item scale (see Appendix C) and women's perceptions of: (1) self-efficacy in relation to goal setting, planning and perceptions of the future (see Appendix D); (2) perceptions of the workplace (see Appendix E); and (3) influence of relationships in decision-making (see Appendix F).

Statistical Analysis

The responses were entered into a database and then analyzed utilizing the software program, Statistical Program for the Social Sciences (SPSS). A factor analysis was performed to identify the response clusters. A cluster analysis was then utilized to classify the participants' responses into the epistemological positions as defined by Belenky et al. based on 12 theoretical items (See Table 14). Based upon these classifications, and the self-identification of participants, a random sample of each category was selected for interviews.

T-tests were conducted to identify the categories to test the questions:

1. Into which epistemological level do women Chief Executive Officers (CEOs) of community colleges primarily occur?
2. How were women CEOs of community colleges mentored during their professional development?
3. Do women of color, who are CEOs of community colleges, show a similar pattern to white women in these positions, in terms of past mentoring experiences and epistemological levels?
4. Are the experiences of women of color with mentoring positive and constructive?

CHAPTER FOUR

RESULTS

The survey instrument was sent to the 290 women CEO's of community colleges; 118 responded to the request for information resulting in a response rate of 40.7%. These respondents have administrative responsibilities at urban (46.6%), rural (37.3%) or other types of campuses, i. e., suburban or tribal (11.9%). Five (4.2%)respondents did not indicate the type of their institution at which they work (See Table 1).

Almost half of the respondents, 56 (47.5%), oversee campuses with full time enrollment (FTE) of 1,000-4,000 students; 41 (34.7%) are at campuses with FTE of 5,000 or more students; with 19 (16.1%) of the respondents are at colleges with FTE less than 1,000. Two respondents did not indicate the FTE of their institutions (See Table 2).

The race and/or ethnicity of the respondents are as follows: eleven (9.3%) are African American; eight (6.7%) are Hispanic; 94 (79.7%) are White, non-Hispanic; three (2.5%) are Asian American; 2 (1.7%) respondents did not respond to this question. (See Table 3).

The majority of the respondents, 37 (31.4%), reported that they have been in senior administrative positions (above director level) between 15 to 19 years. Of these respondents 6 (5.1%) are Women of Color and 31 (26.3%) are White women. Thirty-three (28%) respondents have been in senior administrative positions between 10 and 14 years. Among these respondents, 6 (5.1%) are Women of Color and 27 (22.9%) are White women.) Twenty-three respondents report they have been in senior administrative positions for 20 or more years. Among these respondents, six (5.1%) are Women of Color and 17 (14.4%) are White women. Seventeen (14.5%) respondents report that they

Table 1

Type of Institution--All Respondents

	Frequency	Percentage
Urban	55	46.6
Rural	44	37.3
Other	14	11.9
Not Indicated	5	4.2
Total	118	100.0

Table 2

Full Time Enrollment—All Respondents

	Frequency	Percentage
> 5,000	41	34.7
1,000 – 4,000	56	47.5
< 1,000	19	16.1
Not indicated	2	1.7
Total	118	100.0

Table 3

Race and Ethnicity—All Respondents

Race/Ethnicity	Frequency	Percentage of Total Respondents*
African-American	11	9.3
Hispanic	8	6.7
White, non-Hispanic	94	79.7
Asian American	3	2.5
Not indicated	2	1.7
Total	118	99.9

*Column does not equal 100 due to rounding error.

have been in senior positions between 5 and 9 years. Among these respondents, 4 (3.4%) are Women of Color and 13 (11%) are White women. Four respondents (3.4%) have been in senior positions between one and four years and they are all White women. Only one respondent (.08%) White woman has been in a senior administrative position for less that one year, and she is White (See Table 4).

Only six respondents (5.1%) have been in their current position for less than six months. All of these women are White. A total of nine respondents (7.6%) have been in their current positions from six months to one year. This includes one Hispanic woman and eight White women. Twenty-six respondents (22%) have been in their current positions from one to three years. This includes four African American women, one Hispanic woman, 20 White women and one Asian-American woman. Thirty (25.9%) respondents have been in their current position from three to five years. This includes two African American women, four Hispanic women, 24 White women. Thirty-three (28.4%) of the respondents have been in their current positions between 5 and 10 years. This includes four African-American women, two Hispanic women, 26 White women and one Asian-American woman. There are 12 (10.4%) respondents who have been in their current positions for ten or more years. This includes one African American woman, ten White women and one Asian American woman. Two (1.7%) respondents did not indicate tenure in current position.

Table 4

Length of Service In Senior Administrative Position (above Director) by Race/Ethnicity—All Respondents

	Women of Color	Percentage of Total	White Women	Percentage of Total	Frequency	Percentage of Total*
<1 year	-	-	1	.08	1	.08
1 – 4 years	-	-	4	3.4	4	3.4
5 – 9 years	4	3.4	13	11.0	17	14.4
10 – 14 years	6	5.01	27	22.9	33	28.0
15 – 19 years	6	5.01	31	26.3	37	31.9
20 + years	6	5.01	17	14.4	23	19.5
Not indicated	____	____	____	____	3	2.5
Total	22	18.7	66	78.8	118	99.78

*Column does not equal 100 due to rounding error.

Table 5

Tenure in Current Position—By Race/Ethnicity

	African American			Hispanic			White Non-Hispanic			Asian American			Total		
	No.	% within Tenure	% within Total	No.	% within Tenure	% within Total	No.	% within Tenure	% within Total	No.	% within Tenure	% within Total	No.	% within Tenure	% within Total *
< 6 months	-	-	-	-	-	-	6	100.0	5.2	-	-	-	6	100.0	5.1
6 months – 1 year	-	-	-	1	11.1	.9	8	88.9	6.9	-	-	-	9	100.0	7.6
1 – 3 years	4	15.4	3.4	1	3.8	.9	20	76.9	17.2	1	3.8	.9	26	100.0	22.0
3 – 5 years	2	6.7	1.7	4	13.4	1.7	24	80.0	20.7	-	-	-	30	100.0	25.4
5 - 10 years	4	12.7	3.4	2	6.1	1.7	26	78.8	22.4	1	3.0	.9	33	100.0	27.9
10 + years	1	9.1	.9	-	-	-	10	10.6	8.7	1	9.1	.9	12	100.0	10.1
Not indicated													2		1.7
Total	11		9.4	8		5.2	94		81.1	3		2.7	118		99.8

*Column does not equal 100 due to rounding error.

The majority of the respondents are married, 78 (66.1%). Nineteen (16.1%) of the respondents are divorced; 13 (11%) are unmarried; four (3.4%) are widowed and four (3.4%) did not indicate marital status (See Table 6).

Ninety-six (81.3%) respondents indicated that they do not have children under the age of 18 living at home; 12 (11.2%) indicated that they had one child under the age of 18 living at home; six (5.2%) indicated that they had two children under the age of 18 living at home; one (.9%) indicated that she had three children under the age of 18 living at home. Two (1.6%) respondents did not reply to this question (See Table 7).

In response to the query if the respondents provided care for elderly relatives, 26 (22%) indicated that they provide care for elderly relatives and 90 (76.3%) responded that they do not provide care for elderly relatives. Two (1.7%) respondents did not respond to this question (See Table 8).

Table 6

Marital Status—All Respondents

	Frequency	Percentage
Unmarried	13	11.0
Married	78	66.1
Divorced	19	16.1
Widowed	4	3.4
Not Indicated	4	3.4
Total	118	100.0

Table 7

Children at Home—All Respondents

	Number	Percentage of Total*
None	96	81.3
1	13	11.2
2	6	5.2
3	1	.9
Not indicated	2	1.6
Total	118	100.2

*Column does not equal 100 due to rounding error.

Table 8

Provide Care for Elderly Relatives—All Respondents

	Frequency	Percentage*
Yes	26	22.0
No	90	76.3
Not indicated	2	1.9
Total	118	99.9

*Column does not equal 100 due to rounding error.

Question 1. Into which epistemological level do the respondents primarily occur?

A factor analysis was performed (See Table 9) for the whole sample and three factors emerged. Egan does not report factor loadings for her research, nor does she indicate what type of factor analysis was performed; therefore, it is not possible to compare factor loadings of the two studies. Egan indicated that three groups of items account for 47% of the variance. The current study showed two groups of items that accounted for 36.5% of the variance.

Twelve of the 32 questionnaire items used to measure epistemological positions confirmed the theoretical categories, Constructivist and Proceduralist. Cluster analysis based on responses of these 12 theoretical items resulted in the definition of two groups: Constructivists N=78; and, Proceduralists N=23 (See Table 14). The Final Cluster Centers for Epistemologies (see Table 13) represented on a seven-point Likert Scale with 1 = Strongly Agree and 7 = Strongly Disagree. The means for the responses to the 12 items were used to identify each cluster. Of the 118 respondents, only 104 were included in the factor and cluster analyses. Fourteen were excluded because of incomplete survey responses.

Comparison of cluster loading (See Appendix F) indicated that the current study and the Egan study are similar for the following items: Constructivists were similar for items 11 and 29, Proceduralists were similar for items 22 and 29. The remaining items were dissimilar.

To identify the responses in each category that statistically distinguished respondents in the two categories, a t-test was performed on the 12-scaled items. Differences in the Constructivist and Proceduralist responses to question 2, 4, 14, 18, 19,

22, 24, 28, 29 and 31 were statistical significant. Responses to questions 11 and 16 did not distinguish Constructivists from Proceduralists.

Constructivists demonstrated a strong internal locus of control that is consistent with the Belenky et al. theory. Their strong agreement to questions 2, 4, 14, 18, 19, 22, 24, and 29, by definition, indicate that these women have thoughtfully constructed their career paths, and they have prepared themselves personally and professionally to attain the positions that they now hold. These women are fully aware of the barriers which women face when aspiring to upper administrative ranks, but they are willing to seek out and take advantage of opportunities that will enhance their career development.

Table 9

Scaled Items Used to Define Epistemological Clusters: Constructivists and Proceduralists

Q2	I define my career goals and I am achieving it.
Q4	My expertise gives me power in my workplace.
Q11	If I am successful at my work, it is due to luck, not because of something I had control over.
Q14	I can find ways to make the system work to meet my own objectives.
Q16	To succeed in my career, I am going to have to compromise what I would most like to do, and do what I must.
Q18	I go after opportunities.
Q19	I have identified the barrier(s) to achieving my goal.
Q22	I prepared for what I am doing now.
Q24	Earlier I pictured myself succeeding at what I do now.
Q28	I never had clear career aspirations.
Q29	To be successful a person must comply with externally defined rules and guidelines, but do so according to her own life goals and priorities.
Q31	I will probably never achieve my goals.

Final Cluster Centers for Epistemologies

	Q2*	Q4*	Q11	Q14*
Constructivists	1.1154	1.3590	6.4872	2.0897
Proceduralists	4.0435	3.3043	6.1304	3.1304
	Q16	Q18*	Q19*	Q22*
Constructivists	4.7308	1.3846	1.8974	2.1410
Proceduralists	4.8696	2.3913	3.0000	2.2772
	Q24*	Q28*	Q29*	Q31*
Constructivists	1.6410	6.2949	2.2949	6.9359
Proceduralists	4.6522	4.2174	2.5652	6.0000

1=Strongly Agree, 7=Strongly Disagree
*Indicates statistical significance.

However, the Constructivists are not willing to compromise their values or integrity to achieve their goals, but are able to negotiate through career challenges, holding fast to their ideals and career objectives.

The Proceduralists appear to have a more external locus of control. These women were less likely to construct their career paths or development. They did not demonstrate clear career aspirations or goals, nor did they imagine themselves succeeding. Career barriers are still somewhat of a problem for Proceduralists. Their worldview is predicated on adherence to "the rules" and to organizational structure. Career advancement occurs when, as Egan says, "they are good girls and follow the rules." If one does what is expected, then advancement and promotions will follow. Although both groups disagree that luck is not a deciding factor in their present success, or that they will not achieve their goals, the Constructivists more strongly disagree with this sentiments.

Because there were so few items that showed statistically significant difference, a Leyene's test, which tests the homogeneity of variance, was performed. A homogeneity of variance tests is less dependent on the assumption of normality than most tests. For each case, it computes the absolute difference between the value of a case and its cell mean and performs a analysis of variance on those differences (SPSS, 1998). The sample tested, Constructivists and Proceduralists, do indeed meet the assumption of homogeneity of variances. It is reasonable to assume that this homogeneity of the participants in this study was responsible for a lack of statistical significance in the t-tests.

Question 2. How were women Chief Executive Officers (CEOs) of community colleges mentored during their professional development?

Combining the two epistemological clusters, five (5.1%) women had no mentors, 39 (39.4%) women had one to two mentors and 55 (55.6%) women had three or more mentors (See Table 10).

Responding to the question of the length of their longest mentoring relationship, three (3.2%) respondents (two Constructivists and one Proceduralist) indicated that their longest mentoring relationship was one year. Eight (8.5%) women indicated that their longest mentoring relationship was one to two years. This included seven Constructivists and one Proceduralist. Thirty (31.9%) participants (21 Constructivists and nine Proceduralists) indicated that they had mentoring relationships from two to five years. Fifty-three (56.4%) women indicated that they had mentoring relationships of five years or longer (See Table 11).

When asked about formal mentoring programs at their home institutions, 20 respondents (16.9%) indicated that there were formal mentoring programs on their campuses. However, the great majority, 95 respondents (80.5%), indicated that there were no formal mentoring programs at their institutions (See Table 12).

Twenty-six (22%) participants indicated that they have established a mentoring program on their campuses. While 89 (75.4%) indicated that they have not established mentoring programs at their institutions. Three (2.5%) respondents did not answer this question (See Table 13).

TABLE 10

Had a Mentor by Clusters and Race/Ethnicity

	No Mentors			1-2 Mentors			3 + Mentors			Total		
	No.	% within Group	% within Total	No.	% within Group	% within Total	No.	% within Group	% within Total	No.	% within Group	% within Total
Constructivists												
African American	-	-	-	2	6.5	2.6	4	9.5	5.2	6	7.8	7.8
Hispanic	1	25.0	1.3	-	-	-	4	9.5	5.2	5	6.5	6.5
White, non-Hispanic	3	75.0	3.9	29	93.5	37.7	33	76.6	42.9	65	84.4	84.4
Asian American	-	-	-	-	-	-	1	2.4	1.3	1	1.3	1.3
Total	4		5.2	31		40.3	42	100.0	54.5	77	100.0	100.0
Proceduralist												
African American	1	7.7	4.5	-	-	-	1	7.7	4.5	2	9.1	9.1
Hispanic	-	-	-	1	12.5	4.5	1	7.7	4.5	2	9.1	9.1
White, non-Hispanic	-	-	-	7	87.5		10	76.9	45.5	17	77.3	77.3
Asian American	-	-	-	-	-	-	1	737	4.5	1	4.5	4.5
Total	1		4.5	8		36.4	13		59 1	22		100.0
Total	5			39			55			99		

Table 11

Length of Longest Mentoring Relationship by Epistemological Clusters

	1 year			1-2 years			2-5 years			5+ years			Total		
	No.	% within Cluster	% within Total	No.	% within Cluster	% within Total	No.	% within Cluster	% within Total	No.	% within Cluster	% within Total	No.	% within Cluster	% within Total
Constructivist	2	2.8	2.1	7	9.7	7.4	21	29.2	22.3	42	58.3	44.7	72	100.0	76.6
Proceduralist	1	4.5	1.1	1	4.5	1.1	9	40.9	9.6	11	50.0	11.7	22	100.0	23.4
Total	3		3.2	8		8.5	30		31.9	53		56.4	94		100.0

Table 12

Formal Mentoring Program At Institution—All Respondents

	Frequency	Percentage*
Yes	20	16.9
No	95	80.5
Not Indicated	3	2.5
Total	118	99.9

*Column does not equal 100 due to rounding error.

Table 13

Have you established a mentoring program—All Respondents

	Frequency	Percentage*
Yes	26	22.0
No	89	75.4
Not Indicated	3	2.5
Total	118	99.9

*Column does not equal 100 due to rounding error.

Question 3. Do Women of Color, who are CEOs of community colleges, show similar patterns to White Women in these positions, in terms of past mentoring experiences and epistemological levels?

Utilizing epistemological clusters, race and ethnicity of the participants were analyzed (See Table 14). There are 12 Women of Color and 66 White women who were classified as Constructivists and five Women of Color and 17 White women who were classified as Proceduralists. Within the Constructivist cluster there are six African-American women, five Hispanic women and one Asian-American woman. Within the Proceduralists cluster there are two African-American women, two Hispanic women and one Asian-American woman.

Four (5.2%) Constructivists indicated that they did not have a mentor. This included one Hispanic woman and three White women. Thirty-one (40.3%) Constructivists indicated that they had one to two mentors. This included two African American women and 29 White women. Forty-two women (54.5%) indicated that they had three or more mentors. This included four African American women, four Hispanic women, 33 White women and one Asian American woman.

Within the Proceduralist cluster, only one (4.5%) African American woman indicated that she had no mentors. Eight (36.4%) Proceduralists indicated that they had one to two mentors. This included one Hispanic woman and seven White women. Thirteen (59.1%) women indicated that they had three or more mentors. This included one African American woman, one Hispanic woman, ten White women, and one Asian American woman.

Table 14

Race and Ethnicity by Epistemological Clusters

	African American			Hispanic			White Non-Hispanic			Asian American			Total		
	No.	% within Cluster	% within Total	No.	% within Cluster	% within Total	No.	% within Cluster	% within Total	No.	% within Cluster	% within Total	No.	within Cluster	% within Total
Constructivist	6	7.7	6.0	5	6.4	5.0	66	84.6	66.7	1	1.3	1.0	78	100.0	78.0
Proceduralist	2	9.1	2.0	2	9.0	2.0	17	77.3	17.0	1	4.5	1.0	22	100.0	22.0
Total	8		8.0	7		7.0	83		83.0	2		2.0	100		100.0

T-test results indicate that there is no statistically significant difference between the Constructivists and Proceduralists in their perceptions of mentoring roles. For Constructivists, the areas of strongest agreement about mentoring roles are encouraging, consulting, sponsoring and educating. These are closely followed by role modeling, coaching, counseling, transitioning and protecting. Proceduralists align closely with the Constructivists' responses regarding the mentoring role. In rank order, Proceduralists indicated that encouraging, consulting, educating and sponsoring are the first four mentoring roles. In should be noted that the only difference in the ranking for Constructivists and Proceduralists is the inversion of the third and forth mentoring role, which were sponsoring and consulting. The remaining mentoring roles fall in the same rank order as for Constructivists. Both epistemological clusters rank protecting as the least important function of a mentor (See Table 15).

The participants were asked to identify on a 7 point Likert scale, with 1=Strongly Agree and 7=Strongly Disagree, those similarities that they shared with their primary mentor (See Table 16). There were only two characteristics on which the responses of the Constructivists and the Proceduralists were statistically different. Those two characteristics were education and ambition. There are no statistically significant differences between the two epistemological clusters on the other characteristics.

The characteristics on which the respondents strongly agreed that they shared similarities with their primary mentor are: intelligence, education, race and ambition. Those characteristics that the respondents disagreed they shared similarities with their primary mentor were: gender, physical appearance, outside activities, family life cycle, and personal histories.

Table 15

Constructivists and Proceduralists--Mentoring Role Means

Role	Mean	T Ratio
Role Modeling		
Constructivist	2.2329	-.263
Proceduralist	2.3182	
Encouraging		
Constructivist	1.6301	-.893
Proceduralist	1.8636	
Counseling		
Constructivist	2.5479	-.929
Proceduralist	2.9545	
Transitioning		
Constructivist	2.2672	-1.516
Proceduralist	3.3182	
Educating		
Constructivist	1.8493	-.634
Proceduralist	2.0455	
Consulting		
Constructivist	1.6944	-1.293
Proceduralist	2.0455	
Sponsoring		
Constructivist	1.7945	-1.542
Proceduralist	2.2273	
Coaching		
Constructivist	2.2603	-.504
Proceduralist	2.4545	
Protecting		
Constructivist	5.2466	1.352
Proceduralist	4.3636	

1=Strongly Agree, 9=Strongly Disagree.

Table 16

Constructivist and Proceduralist--Mentor Similarity Means

Similarities	Means	T Ratio
Family life cycle		
Constructivist	4.7286	.003
Proceduralist	4.7273	
Appearance		
Constructivist	6.3099	1.459
Proceduralist	5.7273	
Intelligence		
Constructivist	1.9755	1.982
Proceduralist	2.4091	
Personality		
Constructivist	3.8732	.020
Proceduralist	3.8636	
Background		
Constructivist	4.8310	1.665
Proceduralist	5.5455	
Outside Activities		
Constructivist	5.2571	.270
Proceduralist	5.3636	
Education		
Constructivist	1.5775	2.228*
Proceduralist	2.0909	
Race		
Constructivist	2.3768	.024
Proceduralist	2.3636	
Gender		
Constructivist	5.6901	.543
Proceduralist	5.3636	
Problem Solving		
Constructivist	2.8873	.503
Proceduralist	3.1818	
Age		
Constructivist	4.1972	.157
Proceduralist	4.4091	

1=Strongly Agree, 7=Strongly Disagree
*Indicates statistical significance.

Constructivists and Proceduralists demonstrated no statistical difference in their perceptions of self, relationships and work (See Table 17). Both clusters most strongly agree that they are responsible for their life's direction. This supports the common perception expressed by both clusters that their that their success is the result of work and planning rather than of luck. They also perceive themselves as physically fit and they moderately agree that being physically attractive can be an advantage in their professional development. Both Constructivists and Proceduralists agree that professional and personal relationships are important in the development of professional power. This is supported by the fact that many of the respondents in this study have participated in the workshops and seminars of the National Institute of Leadership Development. The Institute supports and, indeed, encourages a network that they have labeled the "New Girl Network" with members identified as "Leader Sisters."

There is moderate or almost neutral agreement that marriage can help a career. A Proceduralist wrote an unsolicited comment on her returned survey. She wrote, "When I was [single], it is was a major disadvantage—[I was] more of a target for gossip." So, it seems that marriage can stave off either positive or negative speculation. The respondents also disagree strongly with the statement that being single is an advantage to career development. The areas in which the disagreements are most strongly registered are that women trade a relationship for their careers and that their abilities will decrease with age.

Table 17

T-Test Comparing Constructivists and Proceduralists--Perceptions of Self, Relationships and Work

Item	Mean	T Ratio
Life is personal responsibility.		
Constructivist	1.5455	-1.036
Proceduralist	1.7826	
Power comes from relationships.		
Constructivist	2.3590	-.108
Proceduralist	2.3913	
Traded relationship for career.		
Constructivist	5.7013	-.151
Proceduralist	5.7727	
Being single is an advantage.		
Constructivist	4.8194	1.299
Proceduralist	4.1053	
Marriage helps career.		
Constructivist	3.5000	-1.204
Proceduralist	4.0000	
Age decreases ability.		
Constructivist	5.0789	-.378
Proceduralist	5.2174	
I see myself as physically fit.		
Constructivist	2.1410	-1.902
Proceduralist	2.7391	
Attractiveness is an advantage.		
Constructivist	3.2692	-1.566
Proceduralist	3.9130	

1=Strongly Agree, 7=Strongly Disagree.

For four items, there were no statistically significant differences between responses for the Constructivists or Proceduralists regarding their perceptions of the workplace (See Table 21). The two items that show statistical difference are: men and women are treated equally at the respondents' institutions and that their positions were a result of luck. Although both clusters agreed that men and women are treated equally at their institutions, this sentiment is more strongly held by the Constructivists. Conversely, the Constructivists more strongly disagreed, than the Proceduralists, that their positions were a result of luck.

For all of the other items there was strong agreement by both clusters. These women believe that their ideas and opinions are heard and accepted by their colleagues and that there is equal opportunity for women to attain upper level administrative positions at their institutions. They believe that financial remuneration is gender equitable and that they had opportunities and options all along their career path. It is apparent that these women rejected gender barriers, e. g., that women are not offered or considered for senior level administrative positions; that men and women are not treated equally; and, women are not are compensated for their work and expertise.

Question 4. Are the experiences of Women of Color with mentoring positive and constructive?

A t-test was used to assess if there was a statistically significant difference between the attitudes of Women of Color and White women toward mentoring and their mentors. Survey items number 46, 47, 51, 52 and 53 assessed the respondent's attitude about their mentors and mentoring according to race and ethnicity (See Table 22). There is no statistically significant difference between Women of Color and White women for

these items. A test of equality of variance was performed and it was determined that there was no variance between the responses of Women of Color and White women. Therefore, Women of Color and White women share similar attitudes and perceptions of mentoring and the workplace.

Table 18

T-Tests Comparing Constructivists and Proceduralists--For Their Workplace Perceptions

Item	Mean	T Ratio
Women's ideas voice by a man.		
Constructivist	5.7564	-.825
Proceduralist	6.0870	
Less opportunity at top than for a man.		
Constructivist	6.3896	1.918
Proceduralist	5.6957	
Men paid more than women.		
Constructivist	5.6667	1.160
Proceduralist	5.0870	
Men and women treated equally.		
Constructivist	2.2179	-3.970*
Proceduralist	3.8261	
Level determines choice.		
Constructivist	6.3896	1.918
Proceduralist	5.6957	
Position result of luck.		
Constructivist	6.6026	3.085*
Proceduralist	5.8696	

1=Strongly Agree, 7=Strongly Disagree.
*Indicates statistical signifigance

Table 19

Attitude about mentoring and mentor—by Race and Ethnicity

	Mean	T Ratio
I could have succeeded without mentor.		
Women of Color	4.1000	.023
White Women	4.0889	
Mentor provided emotional support.		
Women of Color	3.0000	1.590
White Women	3.0227	
Mentor helped to define what I needed to be successful in career.		
Women of Color	2.2500	.052
White Women	3.0227	
Mentor provided technical support.		
Women of Color	5.9000	1.319
White Women	4.8427	
Mentor provided personal support.		
Women of Color	2.5500	1.436
White Women	3.2556	

1=Strongly Agree, 7=Strongly Disagree

CHAPTER FIVE

DISCUSSION

The purpose of the current study was to determine if the Egan theory of mentoring, developed in the private sector, transfers to other professions. In the case of this study, the profession focused upon was higher education administration. According to Egan's theory, the respondents could be classified into one of the five cognitive epistemologies described by Belenky et al. (1986) by responses given to a set of questions designed for this purpose and the responses should be statistically different and distinctive to each cluster. This was not the case in the current study. The respondents could be classified into two epistemological clusters, Constructivist and Proceduralist; however, the differences between the two groups were not statistically different.

The number of items used to distinguish the epistemological clusters should be increased to provide a more precise measurement and classification of epistemologies. Because these epistemological levels are developmental in nature, it is possible that the women who were identified as Proceduralists were in the end stages of this developmental level and were moving into the higher level, Constructivist. In the original study, Egan noted that women in the earlier stages of Proceduralist would reject mentoring or make cursory use of mentors. In the later stages, however, they begin to recognize that being mentored would have produced a significant positive influence in their career development. It may be that women classified as Proceduralists in this study, at this point, are moving into the Constructivist epistemology. Constructivists understand and embrace mentoring as an important component to professional and career development. In their broader interpretation of knowledge, Constructivists will consider

and accept advice from others and then incorporate that advice into their own perspective of the world if it appears appropriate.

As the instrument is now constructed, it does not distinguish varying gradients within an epistemology. Therefore, it is only possible to propose that there is a movement from one developmental level to another. It would be beneficial to be able to isolate gradients within a specific epistemological level in order to develop strategies to assist protégé's transition from one level to the next.

When a test of equality of variance was performed, it indicated that the respondents were very homogeneous in their responses to questions, that is, except for a very few items, their responses were the same. The current study examined women in one particular position, that of CEO of a community college, rather than a broad range of administrative positions in higher education. This selection of a sample for the study may have contributed to the homogeneity in values and beliefs observed.

Although the statistical analysis of the current data does not fully support Egan's theory, there are some interesting and unanticipated results. Analysis of the survey data for this study identified two epistemological clusters, Constructivist and Proceduralist. There is reason to expect that women in the three lower epistemologies, silent, received and subjective, do not yet have the intellectual, emotional or social maturity to even consider, or be considered for, a position such as Chief Executive Officer of a community college. Because the two epistemologies' responses were not statistically different, the responses were averaged together to produce a combined response mean that was then used to describe the participants' perceptions of self, work place, relationships and mentor functions and similarities.

The importance of mentoring and a positive attitude toward mentoring are supported by the data. Almost all (95%) of these CEO's have had at least one mentor during their careers, while over half (55%) had three or more mentors during their careers. Their mentors provided professional and personal support and helped these women to define success in their own terms. It is interesting to note that of those few women who indicated that they had not had mentors, the majority was identified as Constructivists. This is not consistent with the Egan theory. According to Egan, the data would have been predicted to indicate that the majority of women who never had a mentor would be Proceduralist.

This raises an interesting question. Were these women actually not mentored or was the mentoring in a form, e.g. the female mentoring model, that they did not recognize as mentoring? Twenty years ago, Natasha Josefowitz (1980) was the first management consultant to say that women need to define what success means to them and what accommodations they would be willing to make to reach that success. We see the results of these decisions in the number of women who are participating in higher education as students, faculty and administrators; in the number of women (66%) who do not choose between marriage or a career as they once had; and in the number of women (26%) who are responsible for caregiving to two generations while holding responsible and powerful positions. These are choices that would not have been available to them a generation ago. The support and guidance, which can be labeled as mentoring, provided by previous generations of women administrators fostered the development and aspirations of the women now in administrative positions and for future generations.

The language and structure of Egan's instrument supports a traditional work organization and mentoring model, e.g., a male defined environment. Would the responses have been different if the women were permitted to define the term mentoring and to provide their own suggestions for the role of a mentor? Speaking with women from various levels of higher education administration about mentoring and asking for either a description or definition of the term mentoring, the qualities of honesty, interpersonal and communication skills always were used as part of the definition. These attributes are not the same as identified by Kram (1985).

Another question relates to the information sharing, communication and support that occur within a marriage. Only two women of the 118 respondents indicated that they considered their spouses as their mentors. Is this because the male model of mentoring underpins the conceptualization of mentoring in the Egan survey that the women did not recognize their husbands as "mentors" although they very well could be mentoring them?

Anecdotal information also suggests that although some women can be quite sophisticated about women's leadership styles, they still describe mentoring in traditional terms and, in fact, cannot recognize other patterns of mentoring. They indicated that they have had several sequential mentoring relationships and will reject the notion that they might have concurrent mentors. However, when queried about on-going professional associations and relationships, the female mentoring model becomes apparent. When the female mentoring model is described to them, an epiphany occurs. The disconnect between conscious and subconscious recognition of alternative mentoring models is caused by lack of awareness. Once the patterns are described and discussed, women

readily identify those relationships that provide the supportive and instructional elements of any mentoring relationship.

The literature in the area of women's mentoring presents information regarding the challenges and barriers women face in the workplace and in forming and maintaining mentoring relationships, especially for Women of Color. It speaks of the interlaced factors of racism and sexism that inhibit the career progression of Women of Color, of the misunderstanding of backgrounds and experiences, and of the exclusion of another's worldview. These are vitally important issues for which solutions must be found. But, career and professional development cannot remain static until this occurs.

Obviously, one way to address these issues would be to have more women and Women of Color in senior administrative positions. This would provide an adequate number of women with the ability to undertake the mentor role. Given the female model of mentoring is utilized, protégés will be able to obtain the needed support from a variety of mentors, each focusing on a specific issue and still receive the guidance needed as a woman of color in a predominately white male environment.

The results of this study suggest that White Women and Women of Color share the same positive attitude about mentoring and their mentors. They recognize that their mentors provided emotional and personal support and helped to define the skills and characteristics needed to be successful. The respondents also recognized that mentoring is an important aspect of career development and provides the necessary support, guidance and opportunity for professional advancement. This can be a starting point to extend beyond the current research on mentoring to areas not yet explored.

The belief that women's ideas or suggestions would only be acknowledged if voiced by men or that men are paid more than women, for this group, have been rejected. These women are willing to take risks and to embrace opportunities for advancement. Whether they do not perceive barriers to advancement or that they just don't "accept" barriers to advancement cannot be determined, but the respondents put forth strong convictions that the workplace is equally supportive of women and men in treatment, financial remuneration, respect and opportunities. And, they are fairly adamant about these perceptions. In Egan's study the respondents did not perceive their workplaces as accommodating or responsive to their aspirations.

The current study's combined Constructivists/Proceduralists response mean for this item was 3 (on a 7-point Likert Scale, 1= strongly agree/7=strongly disagree) while in Egan's study, the combined response mean was 4.2. The women CEO's controvert the notion that women have less of an opportunity for advancement than men; the combined response mean was 6. The same item in the Egan study elicited a combined response mean of 3.24. Again, this may reflect differences in the actual opportunities and experiences available to women in higher education versus Egan's broadcasting profession. The differences in workplace perceptions may be caused by several factors: level of education, actual advancement opportunities available to women in higher education, and a change in organizational structures and attitudes toward women because of the increased presence of women and minorities on college campuses (both as students and in administration). Other factors that may influence workplace perceptions are perceptions of self, relationships and work.

The participants of this study demonstrate a strong internal locus of control (combined response mean of 1.6). They believe that their professional success was achieved through their own determination, hard work and ambition, with assistance from mentors and/or sponsors in most cases. Age was neither a detrimental factor or a barrier to career development. When one looks at the time required to obtain advanced degrees and to acquire the necessary experience to become a competent senior administrator, maturity and age almost become a pre-requisite for such positions. Egan's respondents agreed that age would decrease their ability to do their jobs and that attractiveness was an advantage to their careers. In the early 1980's, a Kansas City television anchorwoman, Christine Craft, was fired from her job because she was "too old, too unattractive, did not defer to men and did not hide her intelligence to make men look smarter (Astrachan, 1986, p. 398)." Ms. Craft was forty years old at the time. This blatant form of sex discrimination may not manifest, so obviously, in higher education. However, one cannot rule out the effects of women's physical attractiveness on their administrative career in higher education, regardless of age.

The CEO's agree that marriage enhances career advancement and that they disagree with the concept of "trading" a relationship for a career. These two items indicate a change in attitude toward women in high administrative positions and marital status. Historically, women have had to choose between marriage or long-term relationships and a career (Astin and Leland, 1991; Glazer-Raymo, 1999; Gutek, 1992; Josefowitz 1980; Schmuck, Charters and Carlson, 1981). Apparently, this is no longer the case for these women, 66% of the respondents are married. In one case, it seems that marriage offered protection for one's reputation. A participant wrote an unsolicited

comment on her survey response, " When I was [single], it was a major disadvantage—more of a target for gossip." This is not consistent with the Egan study, which indicated that women in the broadcasting and communication field felt that marriage was not helpful to a career. Perhaps this reflects a mobility required in broadcasting, a mobility that is not necessarily demanded within the academy.

Missirian (1982) asserts that some similarity between mentor and protégé is important in developing a "good" mentoring relationship. This provides a basis for a relationship to develop. If a protégé is identical to her/his mentor in personality, values, characteristics, then one does not have a mentoring relationship, but cloning experiment. The women CEO's do not see themselves as clones. The only areas in which they strongly agreed they were similar to their mentors were in intelligence, with a combined response mean of 2.18, education, with a combined mean of 1.83, and race at 2.36. They are somewhat similar to their mentors in personality with a combined response mean of 3.85.

Most of these women selected, or were selected by, mentors of their own race, but their mentors were not necessarily other women. It is just within the past generation that women were seriously considered for upper level administrative positions. The only source of information and entry to these positions were the men who were in those positions. We now see more women in positions above middle administrative levels than ever before. We will most likely see more in the future. This will provide the approximate women undergraduates and graduate students role models for professional careers in higher education. Leadership training targeted specifically to women in higher education has become more prevalent over the past two decades. Forums such as the

National Institute for Leadership Development and the Bryn Mawr Institute have tutored and supported women in their professional and career development in higher education. Earlier in this document, replication theory was discussed—mentors will generally select a protégé who resembles themselves and, thereby, replicate their leadership and administrative styles. Future generations of CEO's will develop in a context where women college students identify with women already in administrative positions and see their interest and passion for the educational profession.

An area of interest is the similarity between mentor and protégé in the family life cycle. The women CEO's indicated with a combined response mean of 4.72 that they were fairly dissimilar from their mentors in this factor and most of the participants reported that they had male mentors. When discussing the family cycle, one must take into consideration the gender roles and responsibilities that an individual has within the family. The participants work in high-pressure positions. Sixty-six percent are married, 19.5% are divorced or widowed and 11% are unmarried; 17% have children under the age of 18. In addition, 22% care for an elderly relative. This supports the traditional assumption that although women work, they are expected to fulfill familial duties and responsibilities as well.

The women CEO's mirror the profile of female caregivers as identified in the 1998 National Survey of Caregivers conducted by the National Alliance for Caregiving. According to this report, 68% of caregivers are married, 20% are divorced or widowed and 11% are unmarried. Twenty-three percent have children under the age of 18 at home and 28 percent care for elderly relatives (National Family Caregivers Association, 1999). According to this report, approximately 15 hours per week are given to the care of elderly

relatives (National Survey of Caregivers, 1998). That these women, in their multiple roles and responsibilities were still able to advance to the level of CEO, makes their success all the more impressive.

With the increase of women and minorities in senior level administrative and managerial positions in institutions of higher education, in fact, in all institutions and organizations, the critical mass will force a change in institutional and social policy regarding work-life issues. Child and elder care will be offerings at select organizations, to select groups of employees. These will be options available to all employees and at affordable rates. It is not expected that these changes will come from an altruistic perspective, but they will come about in order to maintain a productive and efficient work force.

It is under such circumstances that the emerging female mentoring model can provide much-needed support. Having the opportunity to draw from several sources of information and experience in dealing with the impact of personal duties on professional responsibilities can only enhance a woman's career development and provide the needed support.

Future Research

While some of women's perceptions and attitudes about self, workplace, relationships and mentoring have been addressed, there are still more questions to be asked and answered.

The current study examined perceptions of mentoring in a narrowly defined population. This study should be repeated drawing respondents from various administrative levels in various fields. It would then be possible to determine if Egan's

instrument does generalize to all working professional women. It would be interesting to utilize the survey instrument to assess a protégé's developmental level. The intent would be to create an individualized or semi-individualized mentoring program for the protégé. Areas in which the protégé required additional guidance or support might be identified and addressed. This would help to move the protégé to the next developmental level.

Research on the female mentoring model as proposed by Howard (1988) needs to be undertaken. We may then be able to offer options for mentoring that will provide opportunities for diversified professional and career development. Because the world view is changing and with it the organizational structures our organizations must integrate the wealth of experiences and cultural backgrounds that a multicultural workforce contributes. We are in need of additional tools to assist employees of all levels to be productive, successful and content in their jobs.

Although the survey instrument used in this study does not assess the emerging or female model of mentoring, perhaps the ranking of mentor functions provided by women in this study is somewhat reflective of this model. In a traditional model, the mentor must protect the protégé from untimely exposure and criticism from others in order to protect the mentor's own reputation, status and power (Astrachan, 1986; Howard, 1988; Schockett, 1984). This is one of the reasons why a traditional mentoring relationship emphasizes intense loyalty of both participants. The female model, with its multiple and simultaneous mentors, does not burden any one individual with the full responsibility of protecting one's own or another's reputation. The CEO's in this study ranked protecting as the last of the mentoring roles or functions, with a combined response mean of 4.8.

The top three ranking functions, encouraging, consulting and educating, may well reflect the nurturing or interconnectedness of women's socialization processes. The underlying attributes of women's socialization in our culture are those of sharing, support, accommodation and consensus building. These are also multifaceted women. They do not forget to nurture and care for themselves. By assisting or guiding an administrative neophyte, these women fulfill the stereotypical role of caretaker. Along with fostering their professional and intellectual development, they are aware that to be a whole person, capable of meeting the challenges that they must face in life, their emotional and spiritual developmental needs must also be met. It seems as if they have embraced Margaret Wheatley's philosophy, which defines leadership as an interconnectedness of all aspects of life (1990, 1996). Pressures external to higher education are provoking the academy to embrace different viewpoints and opinions that will redefine the institutional structures. With women comprising half of the national student body and with more women seeking careers in the educational field, the status quo of policy, power and hierarchy will eventually devolve. Mentoring is an important component of this change and leadership philosophy. It is the vehicle by which a more inclusive and diverse skill set is extended to the succeeding administrative generations and to acknowledge and coordinate the multiple roles and responsibilities that are now expected of professional women.

Yet another area for future study would be assessing the correlation, if any, of the female mentoring model with the psychosocial and vocational mentor functions. The purpose would be to investigate the influence of these functions within a female mentoring relationship. Does the ranking order of the mentor functions as viewed by

women originate in professional development or is the ranking an artifact of the female socialization process?

But, perhaps the first question should be, are the psychosocial and vocational functions that were provided to the women in this study actually the factors that women today would identify as important components to the mentoring relationship? Kram identified the psychosocial and vocational mentoring functions over twenty years ago, using mostly male subjects. From antidotal information, women believe that honesty and communication are two important factors of mentoring. While these characteristics can be implied in the mentoring functions used, could they not also be mentoring functions unto themselves? Are there other mentoring functions that women feel are important factors within the mentoring relationship in today's environment?

Research into the mentoring relationship specifically for Women of Color needs to be endeavored. Although there has been preliminary work done on the need for mentoring and role modeling for Women of Color entering and progressing in higher education administration, considerably more information about interactions and attitudes are needed. The current study found that, at least in this sample, there was no discernable difference in attitudes toward mentoring between White Women CEOs and Women of Color CEOs. Of course, this research only begins to address this issue.

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APPENDIX A

SURVEY INSTRUMENT

Survey Questionnaire

For each of the following statements, please circle the number (1 to 7) of the response that most represents you.

1 = strongly agree 7 = strongly disagree
N/A on some questions = Not applicable

(All questions apply to the institution where you are now working. If the statement is not relevant to your institution, please indicate your response to the general situation.)

SA = 1 SD = 7

1. To have her idea listened to by others, a women must have it voiced by a man.
   1 2 3 4 5 6 7
2. I defined my career goal and I am achieving it.
   1 2 3 4 5 6 7
3. Men are paid more than women around here for the same work.
   1 2 3 4 5 6 7
4. My expertise gives me power in my workplace.
   1 2 3 4 5 6 7
5. Men and women are treated equally where I work.
   1 2 3 4 5 6 7
6. The best way for me to have power in my workplace is to acknowledge my weaknesses to my co-workers.
   1 2 3 4 5 6 7
7. Where I work, women are treated better than men when it comes to advancement.
   1 2 3 4 5 6 7
8. Being physically attractive is an advantage in my job.
   1 2 3 4 5 6 7
9. Developing relationships is the best way to gain power.
   1 2 3 4 5 6 7
10. A person whose family responsibilities sometimes interfere with work should not expect the same career rewards (such as promotions and salary increases) as others.
    1 2 3 4 5 6 7
11. If I am successful at my work, it is due to luck, not because of something I had control over.
    1 2 3 4 5 6 7
12. I have less opportunity than a man for the top-level positions at my institution.
    1 2 3 4 5 6 7
13. Once I achieve a certain level in my career, I'll be able to do what I most want to do.
    1 2 3 4 5 6 7
14. I can find ways to make the system work to meet my own objectives.
    1 2 3 4 5 6 7
15. Being single is an advantage in my career.
    1 2 3 4 5 6 7
16. To succeed in my career, I am going to have to compromise what I would most like to do and do what I must.
    1 2 3 4 5 6 7
17. My present position is the result of luck.
    1 2 3 4 5 6 7
18. I go after opportunities.
    1 2 3 4 5 6 7

19. I have identified the barrier(s) to achieving my goal.
1 2 3 4 5 6 7

20. Others believe my ability to do my job will lessen as I get older.
1 2 3 4 5 6 7

21. I feel physically fit.
1 2 3 4 5 6 7

22. I prepared for what I am doing now.
1 2 3 4 5 6 7

23. Being married is a plus for career advancement in a position such as mine.
1 2 3 4 5 6 7

24. Earlier I pictured myself succeeding at what I do now.
1 2 3 4 5 6 7

25. I have traded a lasting relationship for my career.
1 2 3 4 5 6 7

26. To balance career and family, I sacrifice leisure time.
1 2 3 4 5 6 7

27. I am personally responsible for the way my life has turned out.
1 2 3 4 5 6 7

28. I never had clear career aspirations.
1 2 3 4 5 6 7

29. To be successful a person must comply with externally defined rules and guidelines, but do so according to her own life goals and priorities.
1 2 3 4 5 6 7

30. To be successful in a career a person must measure up to external standards, in the same way she did as a "good student."
1 2 3 4 5 6 7

31. I will probably never achieve my goal.
1 2 3 4 5 6 7

32. To be successful in a career a person should make her/his own rules outside the system.
1 2 3 4 5 6 7

The following questions pertain to mentoring. A mentor is defined as a more experienced professional serving as a teacher, sponsor or advisor to a less experienced person (protégé).

33. Some people have had mentors or career helpers. If you have had such a person, or persons, in your life, please *indicate*: I have had:
1. no mentors _____ 2. 1-2 mentors _____ 3. 3 or more mentors _____

If you have never had a mentoring experience, please GO TO QUESTION #34.

IF YOU HAVE HAD A MENTOR(S), PLEASE SKIP QUESTIONS #34-36 AND GO ON TO QUESTION #37.

34. Do you regret no having had a mentor?
1. yes _____ 2. no _____

SA = 1 SD = 7

35. I deliberately avoided mentoring.
1 2 3 4 5 6 7

36. I had no mentor(s) because there were none available to me.
1 2 3 4 5 6 7

(IF YOU HAVE NEVER HAD A MENTOR, PLEASE

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The following is a list of roles mentors sometimes have in the lives of their protégés. For each item, please indicate how important the mentoring role was in your relationship with your *primary mentor*.

1 = most important 9 = least important

37. Role modeling (protégé observes mentor interacting with significant others, dealing with conflict, balancing personal and professional demands).
1 2 3 4 5 6 7 8 9

38. Encouraging (mentor provides positive feedback, emotional support, motivates to do one's best).
1 2 3 4 5 6 7 8 9

39. Counseling (mentor discusses protégé's fears, anxieties, uncertainties).
1 2 3 4 5 6 7 8 9

40. Transitioning (mentor moves from being a superior to a friend or colleague).
1 2 3 4 5 6 7 8 9

41. Educating (mentor teaches, challenges and evaluates the protégé).
1 2 3 4 5 6 7 8 9

42. Consulting (mentor acquaints protégé with political dynamics or informal power structures of a community. Provides information about occupational values, norms and resources).
1 2 3 4 5 6 7 8 9

43. Sponsoring (mentor provides good press for protégé by discussing accomplishments with colleagues, provides visibility, establishes contacts, accompanies protégé to significant professional events).
1 2 3 4 5 6 7 8 9

44. Coaching (mentor clarifies protégé's goals, dreams and methods of implementing them; enables protégé to develop a set of personal and professional standards).
1 2 3 4 5 6 7 8 9

45. Protecting (mentor shields protégé from negative publicity, from damaging contacts; may take the blame for some of protégé's own mistakes).
1 2 3 4 5 6 7 8 9

Please indicate your agreement with the following statements pertaining to your primary mentor.

SA = 1 SD = 7

46. I could have gotten where I am without my mentor.
1 2 3 4 5 6 7

47. My mentor gave me emotional support.
1 2 3 4 5 6 7

For Items 48-50, please check the items that apply:

48. I chose my mentor _____.

49. My mentor was assigned to me _____.

50. My mentor was a colleague _____.

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For items 51-53, please indicate your agreement:

51. My mentor defined what I needed to do to be successful in my career.
1 2 3 4 5 6 7

52. My mentor provided mostly technical support.
1 2 3 4 5 6 7

53. My mentor provided personal support.
1 2 3 4 5 6 7

54. Length of my longest mentoring relationship was:
1. less than 1 yr ____ 2. 1-2 yrs ____ 3. 2-5 yrs ____ 4. 5+ yrs ____

55. How similar to yourself is your primary mentor with respect to the following characteristics? Please circle your response:

	Very Similar = 1						Very Dissimilar = 7
a. physical appearance	1	2	3	4	5	6	7
b. intelligence	1	2	3	4	5	6	7
c. personality	1	2	3	4	5	6	7
d. approach to solving problems	1	2	3	4	5	6	7
e. background, personal history	1	2	3	4	5	6	7
f. activities pursued outside work	1	2	3	4	5	6	7
g. family life cycle	1	2	3	4	5	6	7
h. ambition	1	2	3	4	5	6	7
i. education	1	2	3	4	5	6	7
j. race or ethnic group	1	2	3	4	5	6	7
k. religion	1	2	3	4	5	6	7
l. gender	1	2	3	4	5	6	7
m. age	1	2	3	4	5	6	7

56. My mentor was or is my spouse.
1. _____ yes 2. _____ no

57. My mentoring relationship resulted from a formal mentoring program.
1. _____ yes 2. _____ no

The following is a list of roles mentors sometimes have in the lives of their protégés. For each item, please indicate how important the mentoring role was in your relationship with your *primary mentor.*

1 = most important 9 = least important

37. Role modeling (protégé observes mentor interacting with significant others, dealing with conflict, balancing personal and professional demands).
1 2 3 4 5 6 7 8 9

38. Encouraging (mentor provides positive feedback, emotional support, motivates to do one's best).
1 2 3 4 5 6 7 8 9

39. Counseling (mentor discusses protégé's fears, anxieties, uncertainties).
1 2 3 4 5 6 7 8 9

40. Transitioning (mentor moves from being a superior to a friend or colleague).
1 2 3 4 5 6 7 8 9

41. Educating (mentor teaches, challenges and evaluates the protégé).
1 2 3 4 5 6 7 8 9

42. Consulting (mentor acquaints protégé with political dynamics or informal power structures of a community. Provides information about occupational values, norms and resources).
1 2 3 4 5 6 7 8 9

43. Sponsoring (mentor provides good press for protégé by discussing accomplishments with colleagues, provides visibility, establishes contacts, accompanies protégé to significant professional events).
1 2 3 4 5 6 7 8 9

44. Coaching (mentor clarifies protégé's goals, dreams and methods of implementing them; enables protégé to develop a set of personal and professional standards).
1 2 3 4 5 6 7 8 9

45. Protecting (mentor shields protégé from negative publicity, from damaging contacts; may take the blame for some of protégé's own mistakes).
1 2 3 4 5 6 7 8 9

Please indicate your agreement with the following statements pertaining to your primary mentor.

SA = 1 SD = 7

46. I could have gotten where I am without my mentor.
1 2 3 4 5 6 7

47. My mentor gave me emotional support.
1 2 3 4 5 6 7

For items 48-50, please check the items that apply:

48. I chose my mentor _____.

49. My mentor was assigned to me _____.

50. My mentor was a colleague _____.

For items 51-53, please indicate your agreement:

51. My mentor defined what I needed to do to be successful in my career.
1 2 3 4 5 6 7

52. My mentor provided mostly technical support.
1 2 3 4 5 6 7

53. My mentor provided personal support.
1 2 3 4 5 6 7

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54. Length of my longest mentoring relationship was:
1. less than 1 yr ____ 2. 1-2 yrs ____ 3. 2-5 yrs ____ 4. 5+ yrs ____

55. How similar to yourself is your primary mentor with respect to the following characteristics? Please circle your response:

	Very Similar = 1						Very Dissimilar = 7
a. physical appearance	1	2	3	4	5	6	7
b. intelligence	1	2	3	4	5	6	7
c. personality	1	2	3	4	5	6	7
d. approach to solving problems	1	2	3	4	5	6	7
e. background, personal history	1	2	3	4	5	6	7
f. activities pursued outside work	1	2	3	4	5	6	7
g. family life cycle	1	2	3	4	5	6	7
h. ambition	1	2	3	4	5	6	7
i. education	1	2	3	4	5	6	7
j. race or ethnic group	1	2	3	4	5	6	7
k. religion	1	2	3	4	5	6	7
l. gender	1	2	3	4	5	6	7
m. age	1	2	3	4	5	6	7

56. My mentor was or is my spouse.
1. _____ yes 2. _____ no

57. My mentoring relationship resulted from a formal mentoring program.
1. _____ yes 2. _____ no

APPENDIX B

COVER LETTER

National Institute for Leadership Development

January 14, 2000

Dear Colleague:

We would like to ask your assistance with a project being undertaken by Christine Lash (Leaders, Phoenix 1996), Director of the Women's Studies Resource Center at Arizona State University West. In collaboration with the National Institute for Leadership Development, Christine is spearheading a research study assessing women's mentoring styles and patterns.

This study is being undertaken to better understand how women in leadership positions were mentored during their careers and what experiences and/or relationships they had with their mentors. In addition to contributing to the growing body of information regarding women's leadership and mentoring roles, the research will help us in developing programs and workshops to better support and promote women in their career and professional development.

This research study is anonymous and voluntary and there will be no consequences should you decide not to participate. Also, the results of this study may be published but your name will not be known.

The questionnaire will take approximately 20 minutes to complete. Please take the time to fill out this survey and return it to Christine Lash in the envelope provided.

Thank you for your assistance.

Cordially,

Carrole A. Wolin
President
National Institute for
Leadership Development, AZ

Christine F. Lash
Director
Women's Studies Resource Center
Arizona State University West, AZ

enclosures

1202 West Thomas Road, Phoenix, AZ 85013 602.285.7494 nld@pc.maricopa.edu

APPENDIX C

SCALED ITEMS USED TO IDENTIFY EPISTEMOLOGICAL CLUSTERS

SCALED ITEMS USED TO IDENTIFY EPISTEMOLOGICAL CLUSTERS

Q2 I defined my career goals and I am achieving it.

Q4 My expertise gives me power in my workplace.

Q11 If I am successful at my work, it is due to luck, not because of something I had control over.

Q14 I can find ways to make the system work to meet my own objectives.

Q16 To succeed in my career, I am going to have to compromise what I would most like to do, and do what I must.

Q18 I go after opportunities.

Q19 I have identified the barrier(s) to achieving my goal.

Q22 I prepared for what I am doing now.

Q 24 Earlier I pictured myself succeeding at what I do now.

Q 28 I never had clear career aspirations.

Q 29 To be successful a person must comply with externally defined rules and guidelines, but do so according to her own life goals and priorities.

Q 31 I will probably never achieve my goal.

APPENDIX D

SCALED ITEMS USED TO IDENTIFY
SELF-EFFICACY IN RELATION TO GOAL SETTING, PLANNING
AND PERCEPTIONS OF THE FUTURE

SCALED ITEMS USED TO IDENTIFY
SELF-EFFICACY IN RELATION TO GOAL SETTING,
PLANNING AND PERCEPTIONS OF THE FUTURE

Q1 To have her ideas listened to by others, a women must have it voiced by a man

Q3 Men are paid more than women around here for the same work.

Q5 Men and women are treated equally where I work.

Q7 Where I work, women are treated better than men when it comes to advancement.

Q12 I have less opportunity than a man for the top-level positions at my institution.

Q17 My present position is the result of luck

APPENDIX E

SCALED ITEMS USED TO IDENTIFY
PERCEPTIONS OF THE WORKPLACE

Scaled Items Used to Identify
Workplace Perceptions

Q1 To have her ideas listened to by others, a women must have it voiced by a man.

Q3 Men are paid more than women around here for the same work.

Q5 Men and women are treated equally where I work.

Q7 Where I work, women are treated better than men when it comes to advancement.

Q12 I have less opportunity than a man for the top-level positions at my institution.

Q17 My present position is the result of luck.

APPENDIX F

SCALED ITEMS USED TO IDENTIFY
INFLUENCE OF RELATIONSHIPS IN DECISION-MAKING

SCALED ITEMS USED TO IDENTIFY
Perceptions of Self, Relationships and Work

Q8 Being physically attractive is an advantage in my job.

Q9 Developing relationships is the best way to gain power.

Q15 Being single is an advantage to my career.

Q20 Others believe my ability to do my job will lessen as I get older.

Q21 I feel physically fit.

Q23 Being married is a plus for career advancement in a position such as mine.

Q25 I have traded a lasting relationship for my career.

Q27 I am personally responsible for the way my life has turned out.

APPENDIX G

COMPARISON OF CLUSTER LOADINGS

COMPARISON OF CLUSTER LOADINGS

	Egan	Lash	Egan	Lash	Egan	Lash	Egan	Lash
	Q2		Q4		Q11		Q14	
Constructivists	2.12	1.12	2.12	1.36	6.42	6.10	2.39	3.00
Proceduralists	4.15	4.04	3.35	3.90	4.26	6.10	3.74	3.10
Subjectivists	4.00	--	3.90	--	6.10	--	3.70	--
	Q16		Q18		Q19		Q22	
Constructivists	4.43	4.73	1.55	1.38	2.25	1.90	1.63	1.36
Proceduralists	2.75	4.87	2.92	2.39	2.59	3.00	2.37	2.35
Subjectivists	3.86	--	2.94	--	3.62	--	3.22	--
	Q24		Q28		Q29		Q31	
Constructivists	2.11	1.64	5.86	6.29	2.29	2.29	6.63	6.94
Proceduralists	3.17	4.65	4.45	4.22	2.79	2.75	3.46	6.00
Subjectivists	4.49	--	4.13	--	2.60	--	5.75	--